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Geological Survey, Menlo Park, California

Nov 76

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Volume 4 of water resources data for the 1975 water year for California consists of records of stage, discharge, and water quality of streams; stage, contents, and water quality in lakes and reservoirs; and water levels in wells. This report contains discharge records for 199 gaging stations; stage-only records for 1 gaging station; stage and contents for 30 lakes and reservoirs; water quality for 84 stations, and water levels for 3 observation wells. Also included are 24 crest-stage partial-record stations and 4 low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as special investigations and miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in California.

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U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CA-75-4

Prepared in cooperation with the California Department of Water Resources and with other agencies

II

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Water Resources Data for California

Water Year 1975

Volume 4. Northern Central Valley Basins
and The Great Basin from
Honey Lake Basin to
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CALENDAR FOR WATER YEAR 1975

1974

OCTOBER

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PREFACE

This report was prepared by the U.S. Geological Survey, in cooperation with the California Department of Water Resources and with other agencies, by personnel of the California District of the Water Resources Division under the supervision of Lee R. Peterson, District Chief, and W. H. Robinson, Regional Hydrologist, Western Region.

This report is one of a series issued State by State under the general direction of J. S. Cragwell, Jr., Chief Hydrologist, and G. W. Whetstone, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for California are in four volumes as follows:

✓ Volume 1.	Colorado River Basin, Southern Great Basin from Mexican Border to Mono Lake Basin, and Pacific Slope Basins from Tijuana River to Santa Maria River
✓ Volume 2.	Pacific Slope Basins from Arroyo Grande to Oregon State Line except Central Valley
Volume 3.	Southern Central Valley Basins and The Great Basin from Walker River to Truckee River
Volume 4.	Northern Central Valley Basins and The Great Basin from Honey Lake Basin to Oregon State Line

UNITED STATES DEPARTMENT OF THE INTERIOR

THOMAS S. KLEPPE, Secretary

GEOLOGICAL SURVEY

V. E. McKelvey, Director

Prepared in cooperation with

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California Water Resources Control Board
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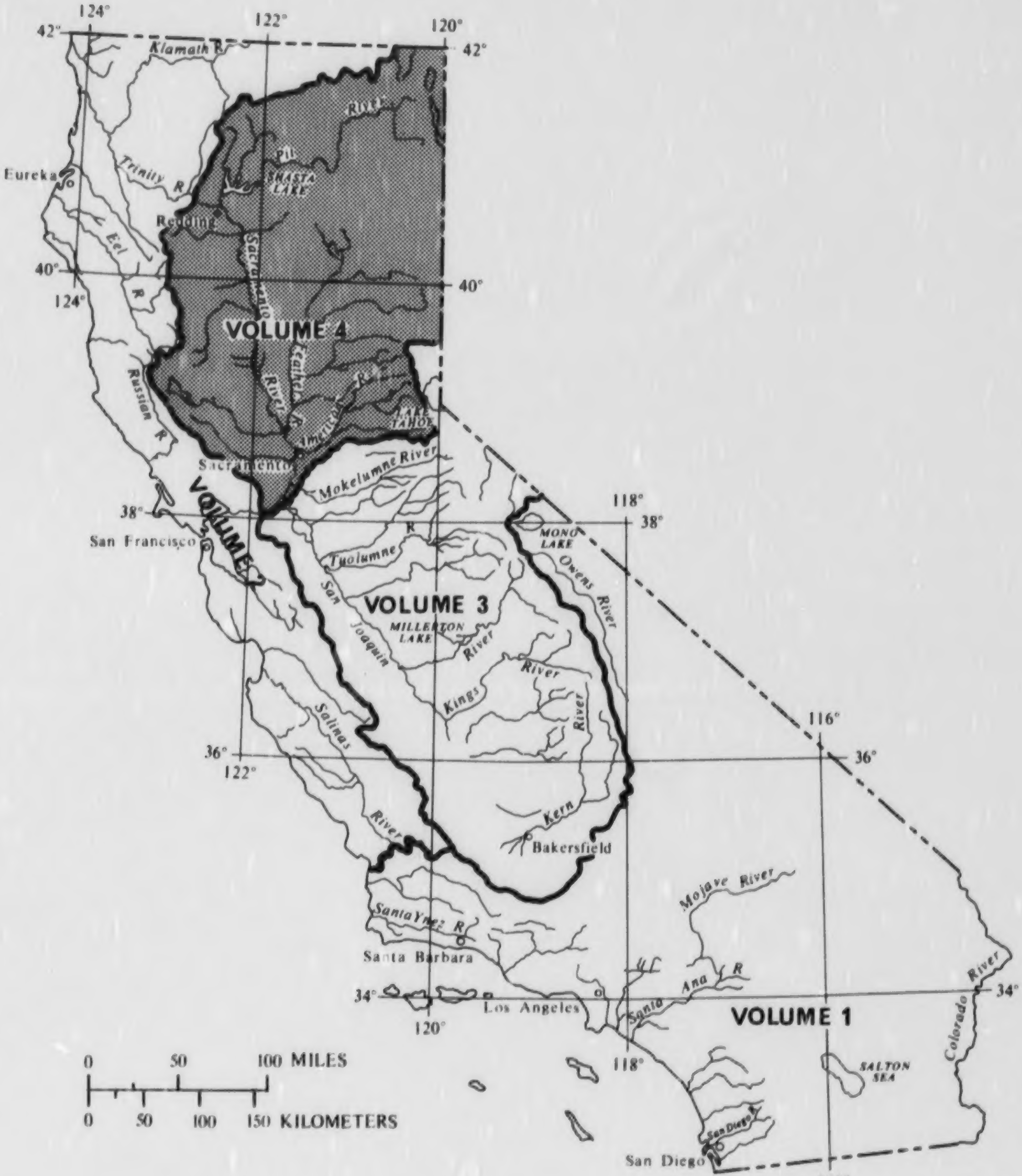
124°
122°
120°
42°
42°
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Pit
River
SHASTA LAKE
Trinity R
Eureka
Redding
Sacramento
Eel
R
40°
40°
124°
VOLUME 4
Feather
R
River
Russian R
American
R
LAKE TAHOE
Sacramento
Mokelumne River
VOLUME 2
38°
San Francisco
118°
38°
MONO LAKE
Owens River
R
Tuolumne
San Joaquin
VOLUME 3
MILLERTON LAKE
River
Kings
River
River
Salinas
36°
122°
116°
36°
River
Kern
Bakersfield
Mojave River
Santa Ynez R
Santa Barbara
34°
Los Angeles
Santa Ana R
VOLUME 1
34°
120°
118°
Colorado River
SALTON SEA
San Diego
San Diego
116°
0
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100 MILES
0
50
100
150 KILOMETERS

Area covered by volumes in the annual series on water-resources data for California. Area covered by this volume is shaded.

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[Letters after station name designate type of data; (d), discharge; (l), lake contents; (c) chemical; (b) biological; (t), water temperature; and (s), sediment]

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WATER RESOURCES DATA FOR CALIFORNIA, 1975

Volume 4

INTRODUCTION

Water-resources data for the 1975 water year for California consist of records of streamflow and contents of reservoirs at gaging stations, partial-record stations, and miscellaneous sites; records of water quality including the physical, chemical, and biological characteristics of surface and ground water; and records of water levels in selected observation wells. Records for a few pertinent streamflow and water-quality stations in bordering States are also included. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of Lee R. Peterson, district chief; Winchell Smith, assistant district chief for hydrologic data; and Leonard N. Jorgensen, chief of the basic data section. These data represent that part of the National Water Data System collected by the Geological Survey and cooperating local, State, and Federal agencies in California.

Records of discharge (or stage) of streams, and contents (or stage) of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through water year 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled, "Ground-Water Levels in the United States."

Beginning with the 1961 water year and continued through water year 1974, streamflow data have been released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records beginning with the 1964 water year, and ground-water data since the 1971 water year have been similarly released either in separate reports or in conjunction with streamflow records. These reports provided rapid release of preliminary water data shortly after the end of the water year. The final data were then released in the water-supply paper series mentioned above. Beginning with the 1975 water year, water data will be released on a State-boundary basis in final form and will not be republished in the water-supply paper series. The 1975 and subsequent water year reports will be in a series which will carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report CA-75-4." These reports are for sale to the public for a nominal fee from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia, 22151. For more information on publications available, see "Publications" on subsequent pages.

COOPERATION

The U.S. Geological Survey and organizations of the State of California have had cooperative agreements for the systematic collection of records since 1903. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

California Department of Water Resources, R. B. Robie, director.
California Department of Transportation, Leo J. Trumbatore, district director.
California Water Resources Control Board, James A. Robertson, executive director.
Georgetown Divide Public Utility District, C. F. Gierau, general manager.
Modoc County Department of Public Works, J. K. Grove, director.
Oroville-Wyandotte Irrigation District, Milton R. Emerson, general manager.
Paradise Irrigation District, C. P. Kelly, manager.
Sacramento County Department of Public Works, Water Resources Division, J. P. Alessandri, chief.
Siskiyou County Flood Control and Water Conservation District, D. A. Gravenkamp, director of public works.
Solano Irrigation District, Brice Bledsoe, secretary-manager.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army; Bureau of Reclamation, U.S. Department of the Interior; Forest Service, U.S. Department of Agriculture; and U.S. Environmental Protection Agency.

The following organizations aided in collecting records: Pacific Gas and Electric Co., Placer County Water Agency, Sacramento Municipal Utility District, Nevada and Oroville-Wyandotte Districts, and Yuba County Water Agency.

DIVISION OF WORK

Responsibility for collection of data and preparation of data reports is delegated to the three subdistrict offices in the California District of the Water Resources Division. This volume was prepared by personnel of the Sacramento subdistrict office under the direction of Robert C. Averett and E. Jerre McClelland, successive subdistrict chiefs. Special acknowledgement is made of the contributions of J. C. Blodgett, John Duensing, and V. F. Pearce who direct the work in the hydrologic data section. Report data were provided by the Redding field office supervised by W. F. Shelton, and by the Sacramento field unit supervised by J. R. Foulk. Records for many of the streamflow stations required under Federal Power Commission licenses were processed under the supervision of J. N. Robles in the Menlo Park subdistrict office. Ground-water and chemical-quality data were assembled under the direction of G. L. Bertoldi. Manuscript typing and assembly of the report was done by the records processing unit under the supervision of A. L. Davis.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, ground-water, and other hydrologic data, as used in this report, are defined below. See also table 5 for converting English units to International System of units (SI).

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are single-celled, colonial, or multicelled plants, which are mostly aquatic, containing chlorophyll and lacking roots, stems, and leaves.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient permeable material to yield significant quantities of water to wells and springs.

Artesian is synonymous with confined. Artesian water and artesian water body are equivalent respectively to confined ground water and confined water body.

Artesian well is a well deriving its water from an artesian or confined water body. The water level in an artesian well stands above the top of the artesian water body it taps.

Bacteria are the microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are described as aerobic, and facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C (degrees Celsius).

Fecal coliform bacteria are the coliform bacteria group that are present in the intestine or feces of warmblooded animals. They are often used as an indicator of the sanitary quality of the water.

Fecal streptococcal bacteria are a group of bacteria found in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are defined as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth.

Benthic organisms (invertebrates) are the group of animals inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, used in the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time.

Ash weight is the weight or amount of residue present after the material from the dry weight determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour.

Dry weight refers to the weight or amount of material present after drying in an oven at a particular temperature, for example 60°C for zooplankton and 105°C for periphyton, until a constant weight is obtained.

Organic weight or volatile weight of the living substance is the difference between the dry weight and the ash weight, and represents the actual weight of the living matter.

Wet weight is the weight of living matter, plus its contained water.

Carotene refers to any of several yellow to red pigments occurring in plants and in the fatty tissues of plant-eating animals.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water composition(s), temperature, period of contact, and other factors.

Chlorophyll refers to the green pigments of plants. Chlorophyll *a* and *b* are the two most common green pigments in plants.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second (FT^3/S, ft^3/s), is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, total fluids) that passes a given point within a given period of time.

Mean discharge is the arithmetic average of discharge during a specific period.

Instantaneous discharge is the discharge at a given time.

Dissolved refers to the amount of a substance present in true chemical solution. In practice, however, the term includes all forms of the substance that will pass through a 0.45-micrometer membrane filter, and thus may include some very small (colloidal) suspended particles. Analyses are performed on filtered samples.

Diversity index (Shannon and Weaver, 1949) is a numerical rating of the variety of the aquatic organisms. The formula for diversity index is $\bar{d} = \sum_{i=i}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$ where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa. Diversity index values range from 0 when all the organisms in the samples are the same to some positive number when some or all the organisms in the sample are different.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given therein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Ft^3/s-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons or 2,445 cubic meters. It represents a runoff of approximately 0.0372 inch from 1 square mile or 0.3468 millimeter from 1 square kilometer.

Gage height is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap that is required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium and carbonate ($CaCO_3$).

Macrophytes are the macroscopic plants in the aquatic environment The most common macrophytes are the rooted vascular plants that are usually arranged in zones in aquatic ecosystems and restricted in area by the extent of illumination through the water and sediment deposition along the shoreline.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult. Examples of metamorphic stages of insects are egg-larva-pupa-adult or egg-nymph-adult.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per liter (UG/L, ug/l) is a unit expressing the concentration of chemical constituents in solution as weight of solute per unit volume (liter) of water and as the concentration of plant pigments, such as chlorophyll, as weight of pigment per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/l) is a unit for expressing the concentration of chemical constituents in solution and the weight of suspended matter. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by miltiplying by the factors in table 1. Concentration of suspended sediment also is expressed in milligrams per liter, and is based on the weight of sediment per liter of water-sediment mixture. Sediment concentrations may be converted to parts per million by using factors in table 2. Dry weight, ash weight, and organic weight values of suspended matter (seston) are expressed in milligrams per liter.

Nekton are the consumers of the aquatic environment consisting of large free-swimming organisms that are capable of sustained, directed mobility.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Cells/volume (cells/ml, cells/l) refers to the number of phytoplankton that are counted by using a microscope and grid or counting cell. Multi-celled phytoplankton are counted by enumerating all the individual contained cells in the filament or colony.

Organism count/area (organisms/m^2, organisms/acre, or organisms/ha) refers to the number of organisms collected and enumerated in a sample and adjusted to the number per unit area of the habitat. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

[Constituents followed by an asterisk(*) are reported in micrograms per liter; multiply by factor and divide results by 1,000]

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*	0.11119	Iodide (I^{-1})	0.00788
Ammonia as NH_4	.05544	Iron (Fe^{+3})*	.05372
Barium (Ba^{+2})	.01456	Lead (Pb^{+2})*	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*	.14411
Bromide (Br^{-1})	.01251	Magnesium (Mg^{+2})	.08226
Calcium (Ca^{+2})	.04990	Manganese (Mn^{+2})*	.03640
Carbonate (CO_3^{-1})	.03333	Nickel (Ni^{+2})*	.03406
Chloride (Cl^{-6})	.02821	Nitrate (NO_3^{-1})	.01613
Chromium (Cr^{+6})*	.11539	Nitrite (NO_2^{-1})	.02174
Cobalt (Co^{+2})*	.03394	Phosphate (PO_4^{-3})	.03159
Copper (Cu^{+2})*	.03148	Potassium (K^{+1})	.02557
Cyanide (CN^{-1})	.03844	Sodium (Na^{+1})	.04350
Fluoride (F^{-1})	.05264	Strontium (Sr^{+2})*	.02283
Hydrogen (H^{+1})	.99209	Sulfate (SO^{-2})	.02082
Hydroxide (OH^{-1})	.05880	Zinc (Zn^{+2})*	.03060

Table 2.--Factors for conversion of sediment concentration in milligrams per liter to parts per million[1]

[All values calculated to three significant figures]

Range of concentration in 1,000 mg/l	Divide by	Range of concentration in 1,000 mg/l	Divide by	Range of concentration in 1,000 mg/l	Divide by	Range of concentration in 1,000 mg/l	Divide by
0-8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05-24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2-40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5-56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5-72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5-88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5-104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105-120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121-136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137-152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153-169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170-185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186-200	1.12	395-409	1.25	604-617	1.38		

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[1] Based on water density of 1.000 g/ml and a specific gravity of sediment of 2.65.

Organism count/unit volume (organisms/ml, organisms/l) refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume. Numbers of planktonic organisms are expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm) , of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in chemically dispersed distilled water.

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024-0.004	Sedimentation
Silt..........	0.004-0.062	Sedimentation
Sand..........	0.062-2.0	Sedimentation or sieve
Gravel........	2.0-64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water.

Percent composition or percent of total is a unit for expressing the ratio of a particular portion of a sample or population to the total sample or population, in terms of types, numbers, weight, or volume.

Periphyton are the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, the periphyton also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

Plankton are the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton are the plant part of the plankton. They are usually microscopic and their movement is subject to water currents. Phytoplankton growth is dependent upon solar radiation and nutrient elements. Phytoplankton are expressed as the number of cells per unit volume of water or types and number of organisms per unit volume of water.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll.

Diatoms are the unicellular or colonial algae having a siliceous shell.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes.

Zooplankton are the animal part of the plankton. They are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms, chiefly green plants.

Milligrams of carbon per unit area or volume per unit time [mg(C/m^2)/time for periphyton and macrophytes and mg(C/m^2)/time or mg(C/m^3)/time for phytoplankton] are units for expressing primary productivity. They define the amount of carbon fixed in the organic matter of the phytoplankton as measured by radioactive carbon (carbon-14).

Milligrams of oxygen per unit area or volume per unit time [mg(O/m^2)/time for periphyton and macrophytes and mg(O_2/m^2)/time or mg(O_2/m^3)/time for phytoplankton] are units for expressing primary productivity. They estimate productivity and respiration rates as determined from changes in the measured dissolved oxygen concentration. Unit time may be expressed per hour or per day depending on the incubation period.

Sediment is solid material that originates mostly from disintegrated rocks and is transformed by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Bedload is the quantity of sediment transported in a stream by rolling, sliding, or skipping along the bed and very close to it; that is, within the bed layer.

Bed material is the sediment mixture of which the moving streambed is composed.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment discharge is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times milligrams per liter times 0.0027.

Total-sediment discharge or total-sediment load is the sum of suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that is discharged during a given time.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft (0.9 m) above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/l).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Seston is the total suspended particulate matter in water. The concentration (weight) of seston is expressed in milligrams per liter.

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos per centimeter at at 25°C). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height and the volume of water per unit of time, flowing in a channel.

Substrate is the physical surface upon which an organism lives.

Natural substrate refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is placed in a stream or lake for colonization of organisms.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchial scheme beginning with Kingdom and ending with *Species*. The higher the classification level, the fewer features the organisms have in common.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the presence of a thermograph or a digital mechanism that records water temperature in digital format on punched paper tape.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the water year.

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Total (as used in tables of chemical analyses) refers to the amount of a substance that is present both in solution and in suspension. Analyses are performed on representative samples of water-suspended sediment mixtures.

Turbidity of a sample is the reduction of transparency due to the presence of particulate matter. In this report it is expressed in Jackson turbidity units (JTU).

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

Weight-percent-organic-matter is the approximate percentage of organic matter, by weight, in the sample. Values were determined by a method modified from one described by Anderson (1963).

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

Irrigation network stations are water-quality stations located at or near certain streamflow gaging stations west of the main stem of the Mississippi River. Data collected at these stations are used to evaluate the chemical quality of surface waters used for irrigation and the changes resulting from the drainage or irrigated lands. Prior to water year 1966, the data for these stations were published in the annual water-supply paper series, "Quality of Surface Water for Irrigation, Western States."

National stream-quality accounting network is an accounting network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on the river-basin accounting units designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in stream quality.

Pesticide program is a network of regularly sampled water-quality stations where additional monthly samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Pesticides are chemical compounds used to control the growth of undesirable plants and animals. Major catagories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide in the early 1930's, there have been almost 60,000 pesticide formulations registered, each containing at least one of the approximately 800 different basic pesticide compounds. The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to substitute many of the chlorinated hydrocarbon pesticides with more specific, fast-acting and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

Radiochemical program is a network of regularly sampled water-quality stations where additional samples are collected twice a year (at high and low flow) to be analyzed for radiosotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Radioisotopes are isotope forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose, 1966, p. 257). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this program are natural uranium in micrograms per liter (ug/l), radium as radium-226 in picocuries per liter (PC/L, pCi/l), gross beta radiation as equivalent strontium/yttrium-90 or cesium-137 in picocuries per liter (PC/L) and gross alpha radiation as micrograms of uranium equivalent per liter (ug/l). Gross alpha and beta radioactivity associated with the fine-grained (silt and clay sized) sediments in the samples are also determined.

A picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of surface-water and water-quality stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each surface-water station, water-quality station, and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record and continuous-record stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left between the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 11264500 which appears just to left of the station name includes the 2-digit number "11" plus the 6-digit downstream order number "264500." In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records for California are in Part 9 (Colorado River Basin), Part 10 (The Great Basin), and Part 11 (Pacific slope basins in California). All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

Downstream order station numbers are not assigned to sites where only random water-quality samples are taken. These sites are classified as water-quality miscellaneous sites, and as a means of location and identification a 15-digit number consisting of the latitude and longitude coordinates to the nearest second for each site plus a 2-digit sequential number are assigned. For example, the station number for a water-quality miscellaneous site with a lat 33°29'27", long 117°39'42" would be 332927117394201.

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The well-numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits is a sequential number for wells within a 1-second grid. The system provides the geographic location of the well and a unique number for each well. In the event that the latitude-longitude coordinates are the same for two or more wells or for a surface-water miscellaneous sampling site and a well site, the sequential numbers "01", "02", etc. are used for differentiation within the same sequence. See figure 1.

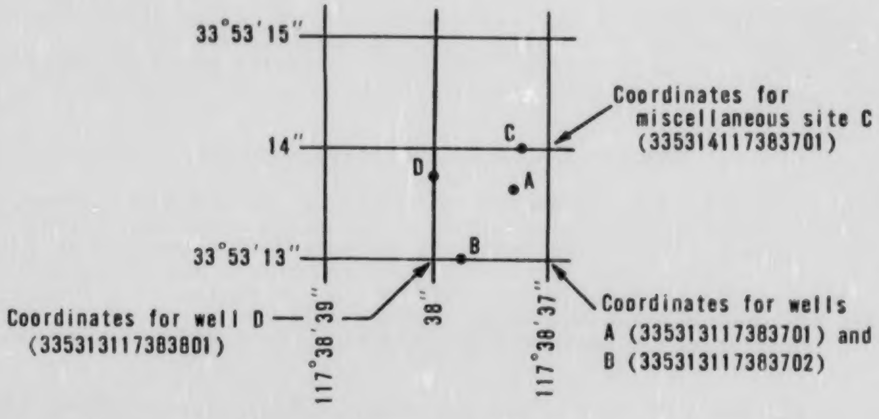
33°53'15"
14"
33°53'13"
C
D
A
B
Coordinates for miscellaneous site C (335314117383701)
Coordinates for well D (335313117383801)
117°38'39"
38"
117°38'37"
Coordinates for wells A (335313117383701) and B (335313117383702)

Figure 1.--System for numbering wells and miscellaneous sites (latitude and longitude).

Local well numbers

Wells and springs in California are assigned numbers according to their location on the rectangular system for the subdivision of public land. For example, in the number 11S/17E-22A1 M, assigned to a well about a mile west of Madera, the part of the number preceding the slash indicates the township (T.11 S.) and the number between the slash and hyphen indicates the range (R.17 E.); the digits following the hyphen indicate the section (sec.22); the letter following the section number indicates the 40-acre subdivision of the section, as shown in figure 2. Within each 40-acre tract, the wells are numbered serially, as indicated by the final digit. The final letter, separated from the rest of the number by a space, indicates the base line and meridian. Base-line and meridian designations are as follows: H, Humboldt; M, Mount Diablo; S, San Bernardino.

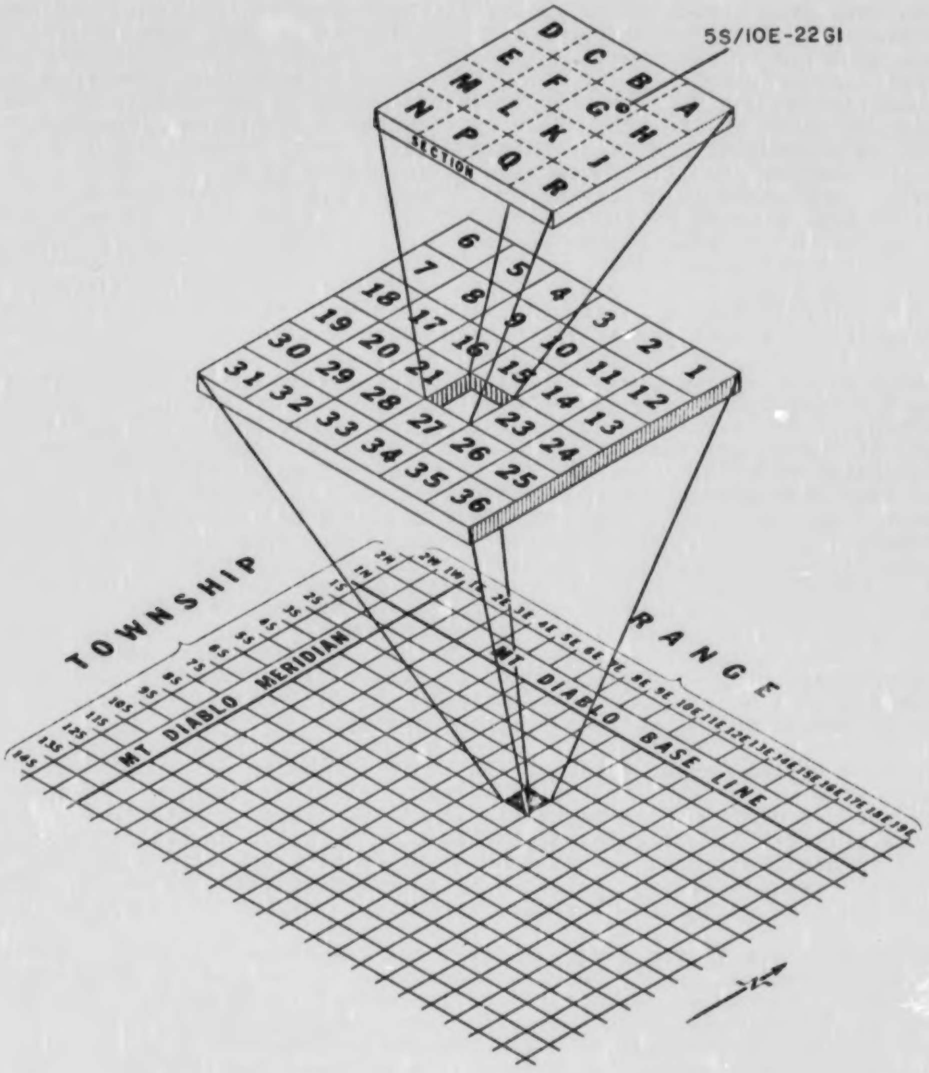
5S/10E-22G1
D
C
B
A
E
F
G
H
M
L
K
J
N
P
Q
R
SECTION
6 5 4 3 2 1
7 8 9 10 11 12
18 17 16 15 14 13
19 20 21 22 23 24
30 29 28 27 26 25
31 32 33 34 35 36
TOWNSHIP
2N
1N
1S
2S
3S
4S
5S
6S
7S
8S
9S
10S
11S
12S
13S
14S
RANGE
2W
1W
1E
2E
3E
4E
5E
6E
7E
8E
9E
10E
11E
12E
13E
14E
15E
16E
17E
18E
19E
MT DIABLO MERIDIAN
MT DIABLO BASE LINE
N

Figure 2.--Local well-numbering system.

EXPLANATION OF SURFACE-WATER RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives a continuous graph of the fluctuations or a tape punched at 15-, 30-, or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in the U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For a stream-gaging station rating tables giving the discharge for any stage are prepared from stage-discharge relation curves defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), velocity-area studies and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in determining discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of basic data. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current year is shown on the reverse side of the front cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, general remarks, and notations of revisions of previously published records. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATIONS" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD." The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey, unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE", it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or the minimum contents), and the minimum gage height if it is significant are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). In the first paragraph headed "Current year:" the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record:" the data given are for the period of record given in the PERIOD OF RECORD paragraph. Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge (or contents) corresponds to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge or maximum contents, it is given separately. Information pertaining to the accuracy of the discharge records, and to conditions that affect the natural flow at the gaging station, is given under "REMARKS"; for reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is also given under "REMARKS."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given.

Skeleton capacity tables are published for all reservoirs for which records of contents are published on a daily basis.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in acre-feet (line headed "AC-FT").

In the yearly summary below the monthly summary, the figures following "MAX" are the maximum daily discharges for the calendar and water years; likewise, those following "MIN" are the minimum daily discharges.

Footnotes to the table of daily discharges are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subjected to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations and miscellaneous sites are given in three tables at the end of the daily records in this report. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites.

Accuracy of data

The accuracy of discharge data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges is within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumptive use, regulation, evaporation, or other factors. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or unadjusted losses (consumptive use, evaporation, seepage, etc.) are large in comparison with the observed discharge.

Publications

In each water-supply paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in California for the period October 1960 to September 1965, are in Water-Supply Papers 1926, 1927, 1928, 1929, 1930, and 1931; and for the period October 1965 to September 1970, are in Water-Supply Papers 2126, 2127, 2128, 2129, 2130, and 2131.

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950, and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for stations in California are compiled in Water-Supply Papers 1313, 1314, 1315-A, and 1315-B through September 1950, and in 1733, 1734, and 1735 for October 1950 to September 1960.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Other data available

Occasionally, discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also at the end of this report.

More detailed information than that published for most of the gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the district office. Many gaging-station records in California through 1968 have been analyzed to give several statistical summaries: (1) the number of days in each year that the daily discharge was between selected limits (duration tables); (2) the lowest mean discharge for selected numbers of consecutive days in each year; and (3) the highest mean discharge for selected numbers of consecutive days in each year.

At or near some gaging stations, water-quality records also are collected. Data are obtained on the chemical quality of the stream water, on water temperature, on suspended-sediment concentration, and on the particle-size distribution of suspended sediment and bed material. These data are given immediately following the gaging station record, or if mentioned in the "REMARKS" paragraph, in the water-quality partial-record section of this report.

Records of discharge collected by agencies other than the Geological Survey

Records of discharge not published by the Geological Survey have been collected at numerous sites by many other Federal, State, County, City, and local agencies, and by private organizations. A listing of stream-gaging stations and the agencies operating them is published in California Department of Water Resources Bulletin 157, "Index of Stream-Gaging Stations in and Adjacent to California." The Office of Water Data Coordination, Water Resources Division, U.S. Geological Survey, Reston, Virginia, 22092, maintains an index of such sites. Information on records at specific sites can be obtained upon request.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and the sediment loads.

Ground-water well samples included in this report are only a few of the total water-quality samples taken, and are for special baseline monitoring programs.

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the periods of record for the various water-quality data, extremes of the pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations. Location descriptions and the drainage area are given for stations where no stream-gaging records are published. For ground-water sampling stations, no descriptive statements are given. However, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of ground water.

Water-quality information is presented for chemical quality, biological, microbiological, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, sodium-adsorption-ratio, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder (thermograph) furnishes information from which daily minimums and maximums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment and bed material.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the U.S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/l) and water temperatures in degrees Celsius (centigrade, °C). In waters with a density of 1.000 g/ml (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter. Temperature reported in degrees Celsius may be converted to degrees Fahrenheit by using table 3.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definitions of Terms," p. 3.).

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)

[Temperature reported to nearest 0.5°C]

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

Biological and microbiological variables

Water samples for bacteria analyses are collected in sterile water-sampling bottles (Van Dorn or Kemmerer-type) or sterile milk dilution bottles. There are individual methods of analyses for the various types of bacteria. Basically, each sample is filtered, preferably within 1 hour but not more than 6 hours after collection, through sterile membrane filters using dilutions determined by the estimated bacterial quality of the water. Fecal streptococcal bacteria are present in fewer numbers than coliform bacteria, so the filtered volume of sample must be larger than that used for other bacterial determinations.

In the determination of total coliform bacteria, the samples are incubated in an enriched nutrient medium at 35°C ±1.0°C for 18-24 hours. For fecal coliform bacteria, the samples are incubated at 44.5°C ±0.2°C for 22 hours ±2 hours. For fecal streptococcal bacteria, the samples are incubated at 35°C ±1.0°C for 48 hours ±2 hours.

After incubation, the number of colonies of each type of bacteria are counted under a lighted dissecting-type microscope. The counts are reported as colonies per 100 milliliters of sample. A complete description of the methods for analysis of each type of bacteria is given in Slack and others (1973).

Benthic organisms are collected with a variety of devices. Usually a clamshell-type grab, which closes upon contact with the bottom substrate, is used in deep water. In soft mud or detritus, a spring-loaded messenger-tripped Ekman grab can be used. In hard substrates a weighted grab may be required. In shallower water and riffle areas of streams, a Surber sampler is a useful sampling device. Artificial substrates may also be used for collection. After collection the benthic organisms are removed from the sample and placed in collection bottles and preserved with ethyl or isopropyl alcohol, or a similar preservative.

In the laboratory, the organisms are identified with the use of a stereoscopic microscope, and the number of individuals of each taxa are enumerated. The number of benthic organisms per area sampled and the percentage composition of each taxon in the sample may be calculated. The diversity of the benthic organism community may also be calculated. Biomass measurements, in grams per square meter can be used to express the quantity of the organic material in a sample of benthic organisms.

Fish are collected with a seine, gill net, electrofishing gear, or by hand. Length-weight relations can be used to compare fish growth from several streams, and comparisons in species composition with time may reveal water-quality trends.

Macrophytes are collected with hooks, rakes, dredges, or by hand. The entire plant is collected, preserved, and analyzed for types and distribution. The density of macrophytes per unit area is expressed in square meters, or as the percentage of water surface covered.

Periphyton are collected with artificial substrates made of plastic or fiberboard materials, or from natural substrates. Artificial substrates are placed in the water, and after a sufficient time for colonization (usually 4 to 6 weeks), the substrates are removed from the water. The periphyton are scraped from a measured area of each substrate and preserved in a dilute formaldehyde solution or Logol's solution for identification. Samples for biomass measurements should be air dried or frozen.

In the laboratory, the samples are examined for types and numbers using a Sedgwick-Rafter counting cell or an inverted microscope. Periphyton concentrations are reported as the number of cells or organisms per area of scraped surface. Biomass determinations of periphyton, expressed as grams per square meter, include measurements of dry weight, ash weight, and the calculation of organic weight.

Phytoplankton are collected with a water-sampling bottle (Van Dorn or Kemmerer-type), depth-integrated sampler, or net. In most studies concerned with phytoplankton types and abundance, the samples are collected at various depths in the euphotic (lighted) zone with a water bottle.

After collection, the samples are preserved in a dilute formaldehyde solution, along with a detergent, or Logol's solution, or if analysis will begin within 2 or 3 hours, the samples may be chilled at 3-4°C. In the laboratory the samples are examined for types and numbers, using either the Sedgwick-Rafter, inverted microscope, or membrane filter methods. Phytoplankton concentrations are reported as the number of cells or organisms per unit volume. Phytoplankton biomass can be estimated by spectrographically measuring the amount of cellular chlorophyll extract. Primary production measurements can also be made on phytoplankton samples using the carbon-14 method or the oxygen light- and dark-bottle method.

Seston can be collected at any depth using a water-sampling bottle, or at depths representative of the entire flow of a stream using a depth-integrating sampler. The sample volume should be adjusted to the amount of suspended material present.

After collection, water samples for seston should be chilled or preserved if filtration is not begun immediately. The sample is filtered through a tared glass-fiber filter to remove the particulate matter. The increase in weight of the filter after drying at 75°C is the measure of the dry weight of particulate matter in the sample. The residue then may be ashed at 500°C, and the organic weight of particulate matter in the sample determined as the difference between the dry weight and ash weight. All biomass determinations of seston are expressed in milligrams per liter.

Zooplankton vary widely in size and are motile, thus they require a variety of sampling techniques. Many zooplankton, such as the copepods and cladecerons, migrate vertically, approaching the surface at night and moving to lower depths at dawn. Vertical movement, and the ability of zooplankton to avoid sampling devices, must be considered in their collection.

Zooplankton are collected with a water-sampling bottle (Van Dorn or Kemmerer-type), sampling tube, water pump, plankton trap, Clarke-Bumpus plankton sampler, or plankton net. The type of sampler to be used depends upon the abundance of zooplankton present and the objectives of the study. There is no single method that can qualitatively and quantitatively sample an entire zooplankton community.

The water sample and contained zooplankton are transferred to sample containers. Samples for species identification and cell counts are preserved in a dilute formaldehyde solution, and those for biomass determinations are preserved by freezing with dry ice.

In the laboratory, the zooplankton are identified and the total number of cells or organisms enumerated using the counting chamber or the Sedgwick-Rafter method. Zooplankton concentrations are reported as the number of cells or organisms per unit volume of water sampled. Zooplankton biomass is reported as the dry weight, ash weight, and weight of organic matter per unit volume of water sample, usually expressed in grams per cubic meter.

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). The method for determining elemental constituents by emission spectrographic techniques is described by Barnett and Mallory (1971). Analysis of pesticides, herbicides, and organic substances in water are described by Goerlitz and Lamar (1967), and Goerlitz and Brown (1972). The collection and analysis of aquatic, biological, and microbiological samples are described by Slack and others (1973).

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between the reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with noncontinuous-digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey district office at the address given on page IV.

Ground-water quality normally does not change significantly during short periods of time; infrequent sampling and analysis of ground water adequately defines ground-water quality at a given site.

Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for surface-water stations. For daily stations, the water temperatures are taken at about the same time each day when sample is collected. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day and month.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration at the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

Turbidity

At some stations samples for the determination of turbidity were collected at the same frequency as samples collected for determination of suspended sediment. Turbidity, measured in Jackson turbidity units (JTU), is shown in relation to the concentration of sediment in the simultaneously collected sample.

Measured values of turbidity are significantly influenced by the type of instrument used. Turbidity values published in California reports prior to July 1966 were determined by means of a Hellige Turbidimeter and are not directly comparable with those published subsequently. Data published in parts per million as silica from July 1966 to September 1968, and in milligrams per liter as silica from October 1968 to September 1970, were measured with a model 1860 Hack Turbidimeter which is optically similar to the model 2100 Hach Turbidimeter used from October 1970 to September 1974, and the model 2100A Hach Turbidimeter used since October 1974. Scales are available for those instruments providing a readout in either milligrams per liter or in Jackson turbidity units. Hence, conversion of data for the period July 1966 through September 1970 from parts per million or milligrams per liter of silica to Jackson turbidity units can be made by use of table 4.

Table 4.--Conversion of turbidity values, measured by Hach Turbidimeters Model 1860 or 2100 from parts per million or milligrams per liter of silica to Jackson turbidity units.

Turbidity, in ppm or mg/l	Turbidity, in JTU
5	3
10	6
50	30
100	55
200	110
500	240
1,000	440

Publications

The following are the numbers of the annual series of Geological Survey water-supply papers that give information on quality of surface waters in California. Data for the Colorado River Basin are given in Part 9, The Great Basin in Part 10, and Pacific slope basins in California in Part 11.

Water year	Water-supply paper	Water year	Water-supply paper	Water year	Water-supply paper
1941	942	1951	1200	1961	1885
1942	950	1952	1253	1962	1945
1943	970	1953	1293	1963	1951
1944	1022	1954	1353	1964	1958
1945	1030	1955	1403	1965	1965
1946	1050	1956	1453	1966	1995
1947	1102	1957	1523	1967	2015
1948	1133	1958	1574	1968	2098, 2099
1949	1163	1959	1645	1969	2148, 2149
1950	1189	1960	1745	1970	2158, 2159
				1971	A2168,A2169

A In preparation.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic national network of observation wells are published herein. These water-level measurements are intended to provide a sampling and historical record of water-level changes in the nation's most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on the grid system of latitude and longitude as shown in figure 1, and (2) a local number that is provided for continuity with older reports and for other use as dictated by local needs (fig. 2).

Measurements are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well insure that measurements at each well are of consistent accuracy and reliability.

Water-level measurements in this report are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above mean sea level is given in the well description.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater.

Publications

Publication of ground-water level data for the United States in water-supply papers was begun by the Geological Survey in 1935. From 1935 through 1939, a single water-supply paper for each year covering the entire nation was issued (Water-Supply Papers 777, 817, 840, 845, and 886). From 1940 through 1974, separate water-supply papers were issued for 6 sections of the United States. Water-level data for California are in the water-supply papers listed below, each report containing one or more calendar years (January-December) of data. Data in this report are for the 12-month water year ending September 30.

Calendar year	Water-supply paper	Calendar year	Water-supply paper	Calendar year	Water-supply paper
1940	911	1946	1076	1963	1270
1941	941	1947	1101	1954	1326
1942	949	1948	1131	1955	1409
1943	991	1949	1161	1956-60	1770
1944	1021	1950	1170	1961-65	1855
1945	1028	1951	1196	1966-70	2010
		1952	1226	1971-74	A2162

A In preparation.

HYDROLOGIC CONDITIONS

Runoff during the 1975 water year averaged about 120 percent of the 1941-70 median in the area covered by this volume. Runoff, at selected sites, as shown in figure 3, was well below normal from November through January. Precipitation during this period was only about 50 percent of normal, resulting in a very light snowpack. In early February, a series of storms brought precipitation that increased the snowpack to about normal. Low temperatures and above-normal precipitation continued into March and increased the snowpack to about 170 percent of normal. A late spring delayed snowmelt and runoff was above normal for the rest of the water year. A rare 2-day August storm produced 3.1 in (79 mm) of precipitation at Blue Canyon in the North Fork American River basin--more than 15 times the usual August precipitation.

Reservoir contents at the end of the 1975 water year in four of the major reservoirs in this area was 120 percent of average.

The quality of the surface water did not change appreciably, and ground-water levels remained stable with minor fluctuations.

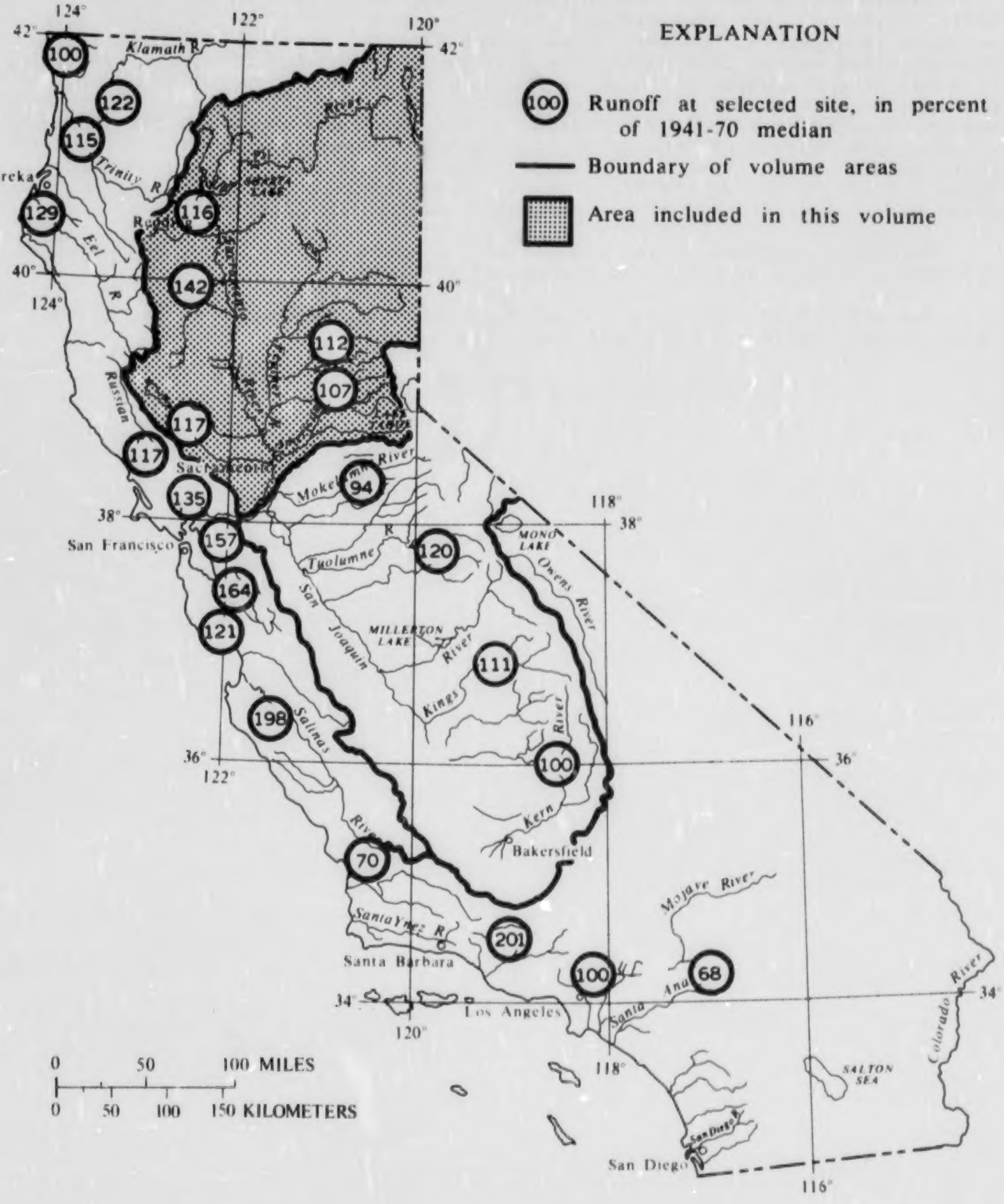
EXPLANATION
100 Runoff at selected site, in percent of 1941-70 median
Boundary of volume areas
▨ Area included in this volume
124°
122°
120°
118°
116°
42°
40°
38°
36°
34°
Klamath R
Trinity R
Eel R
Russian R
Eureka
Redding
Sacramento
San Francisco
Mokelumne River
Tuolumne R
San Joaquin
MILLERTON LAKE
Kings River
Kern River
Bakersfield
MONO LAKE
Owens River
Salinas River
Santa Ynez R
Santa Barbara
Los Angeles
Mojave River
Santa Ana
Colorado River
SALTON SEA
San Diego
100
122
115
129
116
142
112
107
117
117
135
94
157
164
121
120
111
198
100
70
201
100
68
0 50 100 MILES
0 50 100 150 KILOMETERS

FIGURE 3.--Runoff for the current water year.

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Table 5.--Factors for converting English units to International System (SI) units

The following factors may be used to convert the English units published herein to the International System of Units (SI). Reports will contain both the English and SI unit equivalents in the station manuscript descriptions until such time that all data is published in SI units.

Multiply English units	By	To obtain SI units
	Length	
inches (in)	25.4	millimeters (mm)
	.0254	meters (m)
feet (ft)	.3048	meters (m)
yards (yd)	.9144	meters (m)
rods	5.0292	meters (m)
miles (mi)	1.609	kilometers (km)
	Area	
acres	4047	square meters (m^2)
	.4047	*hectares (ha)
	.4047	square hectometer (hm^2)
	.004047	square kilometers (km^2)
square miles (mi^2)	2.590	square kilometers (km^2)
	Volume	
gallons (gal)	3.785	**liters (l)
	3.785	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons (10^6 gal)	3785	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	28.32	cubic decimeters (dm^3)
	.02832	cubic meters (m^3)
cfs-days [(ft^3/s)·d]	2447	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1233	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	28.32	liters per second (l/s)
	28.32	cubic decimeters per second (dm^3/s)
	.02832	cubic meters per second (m^3/s)
gallons per minute (gpm)	.06309	liters per second (l/s)
	.06309	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day (mgd)	43.81	cubic decimeters per second (dm^3/s)
	.04381	cubic meters per second (m^3/s)
	Mass	
tons (short)	.9072	tonne (t)

*The unit hectare is approved for use with the International System (SI) for a limited time. See NBS Special Bulletin 330, p. 15, 1972 edition.

**The unit liter is accepted for use with the International System (SI). See NBS Special Bulletin 330, p. 13, 1972 edition.

10356500 SUSAN RIVER AT SUSANVILLE, CALIF.

LOCATION.--Lat 40°25'03", long 120°40'15", in SW¼NE¼ sec.31, T.30 N., R.12 E., Lassen County, on left bank 0.5 mi (0.8 km) west of Susanville, and 1.1 mi (1.8 km) upstream from Piute Creek.

DRAINAGE AREA.--184 mi² (477 km²).

PERIOD OF RECORD.--June 1900 to December 1905 (gage heights only August 1901 to January 1903), March to May 1913 (gage heights only), February 1917 to June 1921, October 1950 to current year. Published as "near Susanville" 1900-1905. Discharge records for August to December 1901 and January 1903, published in WSP 300, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 4,225.72 ft (1,287.999 m) above mean sea level. Prior to Oct. 1, 1950, nonrecording gages at several sites in vicinity of old powerplant 0.9 mi (1.4 km) upstream at various datums.

AVERAGE DISCHARGE.--31 years (1900-1901, 1903-5, 1917-20, 1950-75), 101 ft³/s (2.860 m³/s), 73,170 acre-ft/yr (90.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 724 ft³/s (20.5 m³/s) May 14 (gage height, 4.45 ft or 1.356 m); minimum daily, 9.5 ft³/s (0.27 m³/s) Sept. 7.

Period of record: Maximum discharge, 5,850 ft³/s (166 m³/s) Jan. 24, 1970 (gage height, 8.89 ft or 2.710 m, 10.4 ft or 3.17 m, from floodmarks), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurement at gage height 6.62 ft (2.018 m) and contracted-opening measurement at gage height 8.89 ft or 2.710 m); no flow Aug. 15, 1961.

REMARKS.--Records good except those for the period Dec. 18 to Jan. 8, which are fair. Flow regulated by McCoy Flat Reservoir and Hog Flat Reservoir, combined usable capacity, 25,300 acre-ft (31.2 hm³). Diversions for irrigation of 1,400 acres (567 hm²) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	19	16	19	16	139	120	258	584	39	125	16
2	10	17	17	20	16	151	114	311	526	51	117	16
3	11	15	20	18	17	124	112	401	476	51	111	16
4	11	15	46	18	17	100	100	364	437	50	105	14
5	11	17	26	18	18	98	91	282	308	48	100	12
6	11	15	23	22	19	124	81	262	315	47	96	10
7	11	16	20	28	20	161	73	305	321	45	92	9.5
8	11	16	18	38	24	220	69	378	319	44	111	10
9	12	16	18	18	31	168	70	458	305	30	109	11
10	12	15	18	17	32	125	76	472	290	25	107	11
11	12	14	19	19	44	103	71	528	277	46	102	45
12	12	14	21	18	48	93	83	514	256	47	119	70
13	12	14	27	18	106	85	121	512	242	46	121	70
14	12	14	22	18	88	73	168	574	228	45	118	70
15	12	14	21	18	63	74	134	566	214	45	117	67
16	13	14	20	18	50	70	115	549	196	52	113	66
17	13	14	20	18	44	64	105	495	156	49	109	64
18	13	17	19	18	46	102	121	514	147	31	132	64
19	12	16	18	18	37	294	141	553	147	20	159	64
20	12	15	18	18	44	192	151	495	132	18	82	63
21	12	29	18	18	41	137	196	476	106	17	71	45
22	11	27	16	17	46	111	210	565	74	16	66	20
23	11	19	15	18	40	89	198	648	61	15	32	13
24	12	18	14	19	35	104	349	643	63	13	19	13
25	13	19	14	22	33	421	323	641	67	13	17	12
26	13	18	15	19	35	211	225	636	55	12	17	11
27	13	17	15	11	53	148	197	648	51	11	16	12
28	21	16	16	10	101	118	198	637	47	11	17	11
29	17	15	17	15	---	105	210	623	44	12	17	10
30	15	17	17	18	---	127	229	611	41	127	15	11
31	18	---	18	16	---	141	---	610	---	148	16	---
TOTAL	389	502	602	580	1164	4272	4451	15529	6485	1224	2548	926.5
MEAN	12.5	16.7	19.4	18.7	41.6	138	148	501	216	39.5	82.2	30.9
MAX	21	29	46	38	106	421	349	648	584	148	159	70
MIN	10	14	14	10	16	64	69	258	41	11	15	9.5
AC-FT	772	996	1190	1150	23.0	8470	8830	30800	12860	2430	5050	1840

CAL YR 1974 TOTAL 61624.4 MEAN 169 MAX 2270 MIN 9.8 AC-FT 122200
WTR YR 1975 TOTAL 38672.5 MEAN 106 MAX 648 MIN 9.5 AC-FT 76710

10356500 SUSAN RIVER AT SUSANVILLE, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water years 1952-58 (partial-record station), October 1958 to current year.

REMARKS.--Records furnished by California Department of Water Resources.

WATER QUALITY DATA. WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
MAR. 19...	1635	400	7200	280	3.2	41	0	34	1.9	.01
AUG. 07...	1050	93	--	--	2.3	35	0	29	2.0	--
SEP. 16...	1420	67	--	--	2.8	45	0	37	.0	--

DATE	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAR. 19...	.60	.22	35	1	.2	0	0	10	0	10
AUG. 07...	--	--	26	0	.2	0	--	--	--	--
SEP. 16...	--	--	36	0	.2	0	--	--	--	--

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
OCT. 09...	1145	12	169	7.8	10.5	1	9.6
NOV. 06...	1430	14	159	7.6	6.0	2	11.9
DEC. 10...	1200	17	164	7.9	2.0	2	13.2
JAN. 13...	1430	19	157	8.2	1.0	2	12.6
FEB. 19...	1300	34	145	7.9	2.0	4	11.6
MAR. 19...	1635	400	72	7.2	4.0	50	10.2
APR. 16...	1015	111	103	7.9	4.0	1	11.6
MAY 07...	0715	284	85	7.4	2.5	5	11.3
JUNE 04...	1210	439	59	7.6	15.0	7	8.7
JULY 15...	1235	46	89	8.3	17.0	10	8.4
AUG. 07...	1050	93	63	7.7	17.0	10	8.7
SEP. 16...	1420	67	76	8.1	18.0	1	8.1

10358500 WILLOW CREEK NEAR SUSANVILLE, CALIF.

LOCATION.--Lat 40°29'21", long 120°32'10", in SW¼NE¼ sec.5, T.30 N., R.13 E., Lassen County, on left bank 4 mi (6 km) upstream from Peters Valley Creek, and 8 mi (13 km) northeast of Susanville.

DRAINAGE AREA.--90.4 mi² (234.1 km²), revised, excludes that of Eagle Lake basin.

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,836.27 ft (1,474.095 m) above mean sea level, unadjusted.

AVERAGE DISCHARGE.--25 years, 35.2 ft³/s (0.997 m³/s), 25,500 acre-ft/yr (31.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 390 ft³/s (11.0 m³/s) Mar. 25 (gage height, 4.53 ft or 1.381 m); minimum daily, 13 ft³/s (0.37 m³/s) on several days.
Period of record: Maximum discharge, 816 ft³/s (23.1 m³/s) Feb. 1, 1963 (gage height, 5.59 ft or 1.704 m), from rating curve extended above 540 ft³/s (15.3 m³/s); minimum, 8.1 ft³/s (0.23 m³/s) Nov. 16, 1951.

REMARKS.--Records good. Diversions for irrigation of 5,200 acres (2,100 km²) above station. Some flow at times enters Willow Creek from Eagle Lake through an abandoned tunnel.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	37	35	33	26	76	70	63	18	16	13	22
2	14	37	36	33	26	108	65	61	16	16	13	24
3	20	36	37	33	34	138	61	63	15	16	13	25
4	21	36	39	34	35	172	61	61	15	16	14	24
5	22	36	39	35	38	188	62	58	15	16	14	21
6	23	36	39	38	39	234	72	56	16	16	14	17
7	25	36	38	40	39	268	71	50	16	16	14	16
8	25	36	37	44	41	328	76	33	15	15	14	16
9	26	36	37	41	48	343	78	29	13	15	14	15
10	26	36	36	39	47	261	79	31	13	14	14	15
11	27	36	35	38	45	215	95	29	13	13	14	16
12	28	36	35	37	45	170	89	29	15	13	14	19
13	33	36	35	36	50	152	82	31	17	13	14	20
14	34	36	35	36	52	121	81	32	19	13	14	22
15	35	36	35	36	51	114	78	31	19	14	14	21
16	34	36	34	36	49	104	73	30	17	13	14	20
17	33	35	34	36	47	94	70	28	15	14	14	21
18	33	35	34	37	45	111	68	26	14	14	15	31
19	33	35	34	37	45	149	69	24	14	14	16	31
20	33	35	34	37	46	152	70	23	14	14	17	29
21	33	37	34	37	44	112	72	22	14	14	19	27
22	33	38	33	36	42	89	70	21	14	14	18	26
23	33	37	33	36	41	98	69	20	14	14	19	26
24	34	35	34	36	40	115	77	19	14	14	31	25
25	37	35	34	36	40	298	83	22	13	14	33	27
26	36	35	33	37	41	180	78	24	13	14	32	28
27	35	35	34	33	43	141	75	24	14	13	32	28
28	37	35	33	34	54	104	69	22	15	13	32	30
29	37	35	32	34	---	92	66	21	16	13	24	31
30	37	35	33	33	---	87	65	20	17	13	22	30
31	38	---	33	33	---	81	---	19	---	13	21	---
TOTAL	928	1075	1084	1121	1193	4895	2194	1022	453	440	566	703
MEAN	29.9	35.8	35.0	36.2	42.6	158	73.1	33.0	15.1	14.2	18.3	23.4
MAX	38	38	39	44	54	343	95	63	19	16	33	31
MIN	13	35	32	33	26	76	61	19	13	13	13	15
AC-FT	1840	2130	2150	2220	2370	9710	4350	2030	899	873	1120	1390

CAL YR 1974 TOTAL 14372 MEAN 39.4 MAX 265 MIN 12 AC-FT 28510
WTR YR 1975 TOTAL 15674 MEAN 42.9 MAX 343 MIN 13 AC-FT 31090

Peak discharge (base, 200 ft³/s).--Mar. 9 (0230) 368 ft³/s (4.46 ft); Mar. 25 (1630) 390 ft³/s (4.53 ft).

10359300 PINE CREEK NEAR SUSANVILLE, CALIF.

LOCATION.--Lat 40°39'54", long 120°47'25", in NE¼SE¼ sec.1, T.32 N., R.10 E., Lassen County, on right bank 0.3 mi (0.5 km) upstream from Eagle Lake, and 18 mi (29 km) northwest of Susanville.

DRAINAGE AREA.--226 mi² (585 km²).

PERIOD OF RECORD.--October 1960 to September 1966, October 1967 to September 1968, October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,120 ft (1,561 m), from topographic map. Prior to September 1968, at site 1.0 mi (1.6 km) upstream at different datum.

AVERAGE DISCHARGE.--13 years (1960-66, 1967-68, 1969-75), 23.7 ft³/s (0.671 m³/s), 17,170 acre-ft/yr (21.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,140 ft³/s (32.3 m³/s) May 15 (gage height, 5.45 ft or 1.661 m); no flow for several months.

Period of record: Maximum discharge, 1,140 ft³/s (32.3 m³/s) May 15, 1975 (gage height, 5.45 ft or 1.661 m); maximum gage height, 5.60 ft (1.707 m) Jan. 24, 1970; no flow for several months in each year.

Flood of May 18, 1967, reached a stage of 5.29 ft (1.612 m), discharge, 826 ft³/s (23.4 m³/s).

REMARKS.--No storage or diversion above station except for minor stock ponds.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	198	97			
2							.10	302	100			
3							0	360	95			
4							0	265	82			
5							0	199	74			
6							0	133	69			
7							0	184	63			
8							0	300	57			
9							0	471	55			
10							0	528	51			
11							0	607	46			
12							0	720	41			
13							0	870	36			
14							0	1040	32			
15							0	1140	28			
16							0	1030	25			
17							0	900	23			
18							0	780	21			
19							1.8	680	21			
20							4.1	585	21			
21							12	436	20			
22							46	325	18			
23							70	258	15			
24							99	221	13			
25							102	196	12			
26							88	160	8.8			
27							80	133	7.3			
28							85	120	5.3			
29					---		105	109	2.8			
30					---		138	105	.70			
31		---			---		---	99	---			---
TOTAL	0	0	0	0	0	0	831.00	13454	1139.90	0	0	0
MEAN	0	0	0	0	0	0	27.7	434	38.0	0	0	0
MAX	0	0	0	0	0	0	138	1140	100	0	0	0
MIN	0	0	0	0	0	0	0	99	.70	0	0	0
AC-FT	0	0	0	0	0	0	1650	26690	2260	0	0	0

CAL YR 1974 TOTAL 17285.40 MEAN 47.4 MAX 567 MIN 0 AC-FT 34290
WTR YR 1975 TOTAL 15424.90 MEAN 42.3 MAX 1140 MIN 0 AC-FT 30600

10360900 BIDWELL CREEK BELOW MILL CREEK, NEAR FORT BIDWELL, CALIF.

LOCATION.--Lat 41°52'57", long 120°10'26", in NE¼SE¼ sec.6, T.46 N., R.16 E., Modoc County, on right bank 0.9 mi (1.4 km) downstream from Mill Creek, and 2.0 mi (3.2 km) northwest of Fort Bidwell.

DRAINAGE AREA.--25.6 mi² (66.3 km²).

PERIOD OF RECORD.--October 1960 to current year. Prior to October 1961, published as Bidwell Creek near Fort Bidwell.

GAGE.--Water-stage recorder. Altitude of gage is 5,000 ft (1,524 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 23.0 ft³/s (0.651 m³/s), 16,660 acre-ft/yr (20.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 181 ft³/s (5.13 m³/s) June 4-7 (gage height, 4.31 ft or 1.314 m); minimum daily, 5.0 ft³/s (0.14 m³/s) Oct. 6, 18-20.

Period of record: Maximum discharge, 682 ft³/s (19.3 m³/s) Dec. 24, 1964 (gage height, 5.64 ft or 1.719 m), from rating curve extended above 105 ft³/s (2.97 m³/s) on basis of slope-area measurement of maximum flow; minimum, 1.4 ft³/s (0.040 m³/s) Nov. 5, 1960.

REMARKS.--Less than 2 ft³/s (0.057 m³/s) diverted upstream for irrigation. No storage above station.

COOPERATION.--Records furnished by the California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WRD Calif. 1971: 1969-70.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	6.3	5.8	5.6	7.1	12	11	23	145	34	12	8.5
2	5.2	6.2	5.8	5.6	7.1	13	11	25	157	31	12	8.3
3	5.2	6.1	6.2	5.6	7.4	14	11	28	167	30	11	8.0
4	5.2	6.1	6.3	5.6	7.4	13	11	30	176	29	11	7.7
5	5.2	6.1	6.3	5.6	7.4	14	12	31	177	29	11	7.4
6	5.0	6.1	6.3	5.6	7.7	14	11	31	178	30	11	7.4
7	5.1	6.1	6.3	5.6	7.7	14	11	30	177	29	11	7.2
8	5.2	6.1	6.1	5.4	7.7	14	11	31	163	27	11	7.1
9	5.2	6.1	6.1	5.4	8.0	14	10	34	141	25	10	7.1
10	5.2	6.1	6.1	5.4	8.0	14	11	38	124	24	11	7.1
11	5.2	6.1	6.2	5.4	8.0	13	11	43	111	23	10	7.5
12	5.2	6.1	6.4	5.4	8.3	12	11	49	109	25	9.6	7.4
13	5.2	6.1	6.8	5.4	8.3	11	12	54	107	24	9.3	7.2
14	5.2	5.9	6.6	5.4	8.3	11	13	58	101	21	9.4	7.1
15	5.2	5.8	6.9	5.4	8.6	11	13	65	100	24	9.6	6.9
16	5.2	5.8	7.4	5.4	8.6	10	14	73	99	24	9.6	6.9
17	5.2	5.8	7.2	5.6	8.6	9.6	14	82	95	21	12	6.9
18	5.0	5.8	6.6	5.6	8.6	9.6	14	87	90	20	14	6.8
19	5.0	5.8	6.5	5.8	9.0	10	15	95	82	19	11	6.7
20	5.0	5.8	6.6	5.8	9.0	11	16	96	77	18	11	6.5
21	5.1	6.0	6.8	6.1	9.0	11	17	88	71	17	10	6.5
22	5.2	6.1	6.5	6.1	9.0	11	19	79	67	16	10	6.3
23	5.4	6.1	6.1	6.3	9.3	11	20	79	63	15	9.8	6.2
24	5.4	6.1	5.9	6.3	9.0	10	22	81	57	15	9.3	6.1
25	5.5	6.1	5.8	6.5	8.6	10	23	84	56	14	9.1	5.8
26	5.6	5.9	5.8	6.5	8.5	11	24	85	53	14	9.0	5.8
27	5.6	6.1	5.8	6.5	8.7	11	23	88	49	14	8.9	5.6
28	6.2	5.9	5.8	6.8	9.7	11	22	93	45	13	9.5	5.7
29	6.5	5.7	5.8	6.8	---	11	22	98	39	14	8.9	5.6
30	6.4	5.8	5.8	6.8	---	11	22	109	37	13	8.7	5.3
31	6.3	---	5.8	7.1	---	11	---	131	---	13	8.7	---
TOTAL	166.3	180.1	194.4	182.4	232.6	363.4	457	2018	3113	665	318.4	204.6
MEAN	5.36	6.00	6.27	5.88	8.31	11.7	15.2	65.1	104	21.5	10.3	6.82
MAX	6.5	6.3	7.4	7.1	9.7	14	24	131	178	34	14	8.5
MIN	5.0	5.7	5.8	5.4	7.1	9.6	10	23	37	13	8.7	5.3
AC-FT	330	357	386	362	461	721	906	4000	6170	1320	632	406

CAL YR 1974 TOTAL 9952.4 MEAN 27.3 MAX 237 MIN 4.8 AC-FT 19740
WTR YR 1975 TOTAL 8095.2 MEAN 22.2 MAX 178 MIN 5.0 AC-FT 16060

11341400 SACRAMENTO RIVER NEAR MT SHASTA, CALIF.

LOCATION.--Lat 41°15'56", long 122°18'32", in SE¼SE¼ sec.33, T.40 N., R.4 W., Siskiyou County, on left bank 200 ft (61 m) upstream from Stink Creek, 0.3 mi (0.5 km) upstream from Southern Pacific Railroad bridge, 1.7 mi (2.7 km) downstream from Box Canyon Dam, and 3.3 mi (5.3 km) south of town of Mt Shasta.

DRAINAGE AREA.--135 mi² (350 km²).

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,800 ft (853 m), from topographic map. Prior to July 1, 1966, water-stage recorder at site 500 ft (152 m) upstream at datum 4.26 ft (1.298 m) higher.

AVERAGE DISCHARGE (adjusted for change in contents in Lake Siskiyou).--16 years, 261 ft³/s (7.392 m³/s), 189,100 acre-ft/yr (233 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,410 ft³/s (42.8 m³/s) May 14 (gage height, 5.73 ft or 1.746 m), minimum daily, 52 ft³/s (1.47 m³/s) Oct. 18-26.

Period of record: Maximum discharge, 12,200 ft³/s (346 m³/s) Dec. 22, 1964 (gage height, 12.6 ft or 3.84 m, from floodmarks, present site and datum), from slope-area measurement of maximum flow; minimum, 37 ft³/s (1.05 m³/s) Sept. 6, 1962. Maximum discharge since construction of Box Canyon Dam in 1968, 11,500 ft³/s (326 m³/s) Jan. 16, 1974 (gage height, 10.25 ft or 3.124 m, from floodmarks), from rating curve extended above 2,900 ft³/s (82.1 m³/s) on basis of flow-over-dam computation of maximum flow; minimum daily, 14 ft³/s (0.40 m³/s) Dec. 8-16, 1972.

REMARKS.--Records good except those for the period Mar. 12 to Apr. 9, which are fair. Flow regulated by Box Canyon Dam 2 mi (3 km) upstream beginning December 1968, capacity, 26,100 acre-ft (32.2 hm³). See schematic diagram of Pit and McCloud River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	177	96	99	130	328	290	448	1310	158	70	60
2	81	175	100	100	131	428	265	507	1200	130	73	61
3	81	128	238	99	131	490	242	623	1090	131	102	61
4	81	91	364	97	128	493	222	630	990	131	111	62
5	81	92	440	97	127	564	200	535	976	131	83	61
6	81	93	349	97	129	600	188	484	970	130	83	62
7	81	121	269	100	134	845	172	489	922	130	83	60
8	81	148	215	105	198	1320	160	551	896	130	82	60
9	81	145	176	104	340	1120	150	707	618	130	83	60
10	81	187	124	104	292	974	145	841	427	130	81	60
11	83	221	59	103	275	941	146	834	556	129	82	61
12	84	221	59	101	322	310	149	832	499	129	83	61
13	67	169	59	102	430	295	153	940	543	129	82	60
14	53	133	59	102	543	280	158	1230	577	129	81	59
15	53	134	59	102	520	335	157	1290	549	100	73	58
16	53	133	59	102	513	385	158	1190	477	113	61	57
17	53	91	84	102	420	495	204	1110	388	137	61	56
18	52	59	104	103	228	750	263	1100	351	138	61	56
19	52	59	104	104	157	875	365	1140	321	138	61	57
20	52	58	115	106	157	700	399	1040	292	138	61	59
21	52	140	127	107	155	565	410	743	260	118	61	62
22	52	230	127	108	155	500	421	560	235	100	62	62
23	52	224	127	109	155	425	428	658	235	87	76	64
24	52	182	127	120	156	465	524	877	242	60	88	62
25	52	140	125	137	158	535	574	844	248	60	88	62
26	52	138	112	138	157	520	482	821	273	59	88	63
27	73	116	102	222	179	435	465	909	275	59	77	63
28	132	97	102	276	250	365	426	973	264	59	61	63
29	183	97	100	128	---	330	437	1060	219	69	61	62
30	178	97	100	128	---	320	441	1160	173	67	60	63
31	178	---	99	129	---	312	---	1250	---	66	60	---
TOTAL	2467	4096	4382	3631	6670	17300	8794	26376	16376	3415	2339	1817
MEAN	79.6	137	141	117	238	558	293	851	546	110	75.5	60.6
MAX	183	230	440	276	543	1320	574	1290	1310	158	111	64
MIN	52	58	59	97	127	280	145	448	173	59	60	56
AC-FT	4890	8120	8690	7200	13230	34310	17440	52320	32480	6770	4640	3600
MEAN a	71.1	145	105	120	244	559	321	858	533	116	72.5	63.5
AC-FT a	4,370	8,640	6,470	7,400	13,560	34,350	19,090	52,760	31,740	7,160	4,460	3,780
(b)	25,500	26,020	23,800	24,000	24,330	24,370	26,020	26,460	25,720	26,110	25,930	26,110

CAL YR 1974 TOTAL 140872 MEAN 386 MAX 9600 MIN 45 AC-FT 279400 MEAN a 385 AC-FT a 278,800
WTR YR 1975 TOTAL 97663 MEAN 268 MAX 1320 MIN 52 AC-FT 193700 MEAN a 268 AC-FT a 193,800

a Adjusted for change in contents in Lake Siskiyou.
b Contents, in acre-feet, at end of month in Lake Siskiyou.

11341400 SACRAMENTO RIVER NEAR MT SHASTA, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: May 1970 to September 1972.
Water temperatures: October 1965 to current year.
Sediment records: Water year 1972 (partial-record station).

EXTREMES.--Current year:
Water temperatures: Maximum, 20.0°C July 12; minimum, 2.5°C Jan. 31, Feb. 22.
Period of record:
Water temperatures: Maximum (1966 to current year), 20.0°C July 25-28, 1974, July 12, 1975; minimum (1965-66, 1967 to current year), 1.5°C on several days in 1968 and 1969.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	12.0	12.5	12.0	9.5	8.0	5.5	5.0	4.5	3.5	5.0	4.5
2	15.0	12.5	12.5	11.5	9.0	8.0	5.5	4.5	4.5	4.0	5.5	4.5
3	15.0	12.5	12.5	10.5	8.0	7.5	5.5	4.5	4.0	3.5	5.0	4.5
4	14.5	12.5	12.0	10.5	8.5	7.5	5.5	4.5	4.5	3.5	5.5	4.0
5	14.5	12.0	12.0	10.5	9.0	8.5	5.5	4.5	4.5	3.5	5.0	4.5
6	14.5	11.5	12.0	11.0	9.0	8.5	6.0	5.0	4.5	4.0	5.0	4.5
7	15.0	12.0	11.5	11.0	9.0	8.5	6.0	5.5	5.0	4.0	5.0	4.5
8	14.5	12.5	11.5	10.5	8.5	8.0	6.0	4.5	4.5	3.5	5.0	4.5
9	15.0	12.5	12.0	10.5	8.5	7.5	5.0	4.5	4.5	3.5	5.0	5.0
10	14.5	12.5	12.0	10.5	8.5	7.5	5.5	4.5	4.5	4.0	5.0	4.5
11	15.0	12.5	12.0	11.0	8.5	8.0	5.5	4.5	4.5	4.0	5.5	5.0
12	15.0	12.5	12.0	11.0	8.5	7.5	5.5	4.5	4.5	3.5	5.5	4.5
13	15.0	12.5	11.5	10.5	8.0	7.5	5.5	4.5	5.0	4.0	5.5	5.0
14	14.5	11.5	11.5	10.5	8.5	7.5	6.0	4.5	4.0	3.5	6.5	5.0
15	14.5	11.5	11.5	10.5	9.0	8.0	6.0	5.0	4.0	3.5	5.5	4.0
16	14.5	11.5	11.5	10.0	8.5	7.5	6.0	5.0	4.0	3.5	5.5	4.5
17	14.5	11.5	11.0	10.0	8.0	7.0	6.0	4.5	4.0	3.5	5.0	4.0
18	15.0	11.5	11.0	9.5	8.0	7.0	6.0	4.5	4.5	3.5	5.0	4.0
19	14.0	11.5	10.5	9.0	8.0	7.0	6.0	4.5	4.5	3.5	5.5	5.0
20	13.5	11.5	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	5.0	4.5
21	13.5	11.0	10.0	8.5	8.0	7.0	6.0	5.0	4.0	3.0	5.0	4.0
22	13.5	10.5	10.0	8.5	7.0	6.5	6.0	4.5	4.5	2.5	5.0	4.5
23	13.0	10.5	9.0	8.5	6.5	6.0	6.5	5.0	5.0	3.0	5.0	4.5
24	13.5	10.5	---	---	6.5	6.0	6.5	5.0	5.0	3.5	5.5	4.5
25	13.5	11.0	---	---	6.5	6.0	6.5	5.0	5.5	3.5	6.0	4.0
26	13.5	11.5	---	---	7.0	5.5	5.5	4.5	5.0	4.0	6.0	3.5
27	13.5	12.0	---	---	6.0	5.0	4.5	4.0	5.5	4.5	6.0	4.0
28	13.0	12.5	10.0	8.5	6.0	5.0	4.5	4.0	5.5	4.5	5.5	3.5
29	13.0	12.5	9.5	8.0	5.5	4.5	4.5	3.5	---	---	6.0	4.5
30	13.0	12.5	9.5	8.0	6.0	5.0	4.5	3.5	---	---	6.5	5.0
31	13.0	12.5	---	---	5.5	4.5	4.0	2.5	---	---	6.0	5.0
MONTH	15.0	10.5	12.5	8.0	9.5	4.5	6.5	2.5	5.5	2.5	6.5	3.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	4.5	7.5	5.5	9.5	8.5	---	---	17.5	12.0	15.0	11.0
2	5.5	5.0	7.5	6.0	9.0	9.0	---	---	18.0	13.0	15.0	10.5
3	6.0	4.5	8.0	6.5	10.0	9.0	---	---	18.5	12.0	15.0	11.0
4	6.0	4.5	8.0	7.0	9.5	8.0	---	---	16.5	12.0	16.0	11.0
5	6.0	4.5	7.5	6.5	---	---	---	---	16.0	11.5	15.5	11.0
6	6.5	4.0	8.0	6.5	---	---	---	---	15.5	11.5	16.0	11.0
7	5.5	5.0	8.0	6.5	---	---	---	---	15.5	11.0	15.0	11.0
8	6.5	5.0	9.0	7.0	---	---	18.5	15.5	16.0	11.0	16.0	11.0
9	7.5	5.0	8.5	8.0	---	---	18.5	15.0	15.5	11.5	14.5	12.0
10	6.5	5.0	8.5	8.0	---	---	19.0	15.5	15.5	12.0	15.0	12.0
11	7.5	5.0	9.0	8.0	---	---	19.0	16.0	16.0	11.5	15.5	12.0
12	8.0	5.0	9.0	8.0	---	---	20.0	16.5	15.5	12.0	15.0	12.0
13	7.5	5.0	9.0	8.5	---	---	19.5	16.0	15.5	12.0	15.5	12.0
14	6.5	5.0	8.5	8.0	---	---	18.5	16.0	15.5	11.5	16.0	11.5
15	7.0	5.0	8.5	8.0	---	---	17.5	12.5	15.5	11.5	15.5	11.0
16	7.5	4.5	8.5	7.5	---	---	15.5	12.0	16.5	11.5	15.0	11.5
17	8.0	5.0	8.5	7.5	---	---	15.0	12.0	13.5	12.0	15.0	11.0
18	8.0	6.0	8.5	8.0	---	---	15.5	11.5	14.0	12.0	15.0	11.0
19	7.5	6.0	8.5	7.5	---	---	15.0	12.0	15.5	11.0	15.5	11.5
20	7.5	5.5	8.0	7.0	---	---	15.0	11.5	16.0	11.0	15.0	11.5
21	7.0	5.5	8.5	7.0	---	---	16.0	12.0	15.5	11.5	15.0	11.0
22	6.5	5.5	8.5	6.5	---	---	16.0	12.0	16.0	11.5	14.5	11.0
23	6.5	5.5	9.0	7.0	---	---	16.0	12.0	15.0	12.0	15.5	11.5
24	6.5	5.5	9.0	8.0	---	---	17.5	12.0	15.5	12.0	14.5	11.5
25	6.5	6.0	9.0	8.0	---	---	17.5	12.0	15.5	11.5	15.0	11.5
26	7.0	5.5	9.0	8.0	---	---	17.5	12.0	16.5	12.0	14.5	11.0
27	7.0	5.5	9.5	8.5	---	---	17.5	12.0	15.0	11.5	16.0	10.5
28	7.0	5.5	9.5	8.5	---	---	17.5	12.0	15.5	11.5	15.0	10.5
29	7.0	5.5	9.5	9.0	---	---	16.5	13.0	15.0	11.0	14.5	11.0
30	7.0	5.5	10.5	9.0	---	---	16.5	11.5	15.0	10.5	14.5	10.5
31	---	---	9.5	8.5	---	---	16.5	11.0	15.0	10.5	---	---
MONTH	8.0	4.0	10.5	5.5	---	---	---	---	18.5	10.5	16.0	10.5

11342000 SACRAMENTO RIVER AT DELTA, CALIF.

LOCATION.--Lat 40°56'23", long 122°24'58", in SW¼NW¼ sec.35, T.36 N., R.5 W, Shasta County, Bureau of Reclamation property, on left bank 0.2 mi (0.3 km) downstream from Dog Creek, 0.6 mi (1.0 km) southeast of Delta, and 2.8 mi (4.5 km) south of Lamoine.

DRAINAGE AREA.--425 mi^2 (1,101 km^2).

PERIOD OF RECORD.--October 1944 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 1,075.00 ft (326.660 m) above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--31 years, 1,202 ft^3/s (34.04 m^3/s), 870,800 acre-ft/yr (1,070 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 14,600 ft^3/s (413 m^3/s) Mar. 8 (gage height, 12.51 ft or 3.813 m); minimum daily, 245 ft^3/s (6.94 m^3/s) Oct. 20, 21, Sept. 21, 22.

Period of record: Maximum discharge, 69,800 ft^3/s (1,980 m^3/s) Jan. 16, 1974 (gage height, 27.20 ft or 8.291 m), from rating curve extended above 19,000 ft^3/s (538 m^3/s) on basis of slope-area measurements at gage heights, 19.50 ft (5.944 m) in gage well, 20.0 ft (6.10 m), from floodmarks, and 27.20 ft (8.291 m) in gage well, 28.7 ft (8.75 m), from floodmarks; minimum, 141 ft^3/s (3.99 m^3/s) Sept. 3-5, 1950.

REMARKS.--Records good. Some regulation from Box Canyon Dam near the town of Mt Shasta. Some minor diversions for irrigation above station. See schematic diagram of Pit and McCloud River basins.

REVISIONS (WATER YEARS).--WSP 1395: 1951(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	269	384	319	359	569	2190	2360	2280	3330	614	307	268
2	277	373	477	354	623	6290	2220	2430	3010	563	305	266
3	278	365	2910	352	698	4190	2090	2710	2800	552	300	264
4	278	309	2570	365	1010	3180	1930	2620	2630	541	346	261
5	278	298	1240	391	735	2720	1750	2200	2650	531	297	259
6	278	298	963	462	884	2740	1620	2180	2550	518	295	257
7	277	373	726	602	1580	6480	1550	2120	2510	509	291	255
8	278	422	648	1190	2090	12100	1480	2290	2240	500	289	254
9	282	365	539	757	5970	7020	1410	2640	2020	486	287	254
10	282	359	507	614	3960	4920	1330	2890	1460	479	288	259
11	279	412	398	535	2480	4020	1340	2810	1710	467	286	257
12	277	428	398	496	6770	3420	1400	2600	1570	461	284	254
13	276	396	391	479	7320	3130	1550	3060	1560	472	283	254
14	251	334	378	481	4170	2270	1730	3640	1580	454	283	253
15	249	331	370	502	2940	2240	1610	3790	1530	492	284	251
16	248	331	375	520	2360	2370	1470	3450	1400	445	270	249
17	247	333	368	543	1960	2390	1410	3340	1190	462	273	248
18	246	312	395	569	1600	6530	1440	3410	1070	453	291	248
19	246	262	386	573	1410	7130	1550	3430	1030	443	285	248
20	245	276	382	578	1300	4560	1720	2990	934	432	279	247
21	245	1290	415	551	1180	3770	1790	2500	902	425	275	245
22	247	815	405	526	1100	3160	1890	2150	833	385	277	245
23	249	534	391	568	1060	2800	2020	2370	819	376	273	246
24	250	488	377	509	1070	2870	3620	2720	848	343	293	246
25	251	433	374	545	1170	4480	3640	2580	815	324	291	248
26	252	394	378	556	1230	3480	2830	2460	781	319	289	249
27	267	378	448	547	1290	2840	2420	2670	828	312	290	248
28	524	336	416	638	1540	2470	2260	2810	759	309	284	248
29	415	328	377	584	---	2350	2210	2950	738	318	277	248
30	382	323	376	453	---	2610	2210	3160	636	330	272	247
31	405	---	358	482	---	2530	---	3280	---	314	268	---
TOTAL	8808	12258	19036	16611	60069	123050	57850	86730	46733	13629	8912	7576
MEAN	284	409	614	536	2145	3969	1928	2798	1558	440	287	253
MAX	524	1290	2910	1190	7320	12100	3640	3790	3330	614	346	268
MIN	245	276	319	352	569	2190	1330	2160	636	309	268	245
AC-FT	17470	24310	37760	32950	119100	244100	114700	172000	92690	27030	17680	15030

CAL YR 1974 TOTAL 637608 MEAN 1747 MAX 53900 MIN 238 AC-FT 1265000
WTR YR 1975 TOTAL 461262 MEAN 1264 MAX 12100 MIN 245 AC-FT 914900

11342000 SACRAMENTO RIVER AT DELTA, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), December 1953 to September 1972, water years 1973 to current year (partial-record station).
Water temperatures: June to September 1951, October 1953 to September 1957, October 1962 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 22.0°C July 25, 26, Aug. 24-26; minimum, 3.0°C on several days during January.
Period of record:
Water temperatures: Maximum (1951, 1953-57, 1963 to current year), 29.5°C July 15, 1972; minimum, freezing point on several days in 1964, 1967, 1968, and 1973.

REMARKS.--Chemical-quality analyses furnished by California Department of Water Resources. Clock stopped Mar. 9-18, June 19 to July 8; range in temperature, 6.0°C to 8.5°C and 12.5°C to 20.0°C, respectively.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED BORON (B) (UG/L)
MAR. 19...	0800	7600	2.5	33	0	27	3.8	29	2	.2	0

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
NOV. 08...	1350	402	120	7.5	9.0	8	12.5
JAN. 14...	1430	400	130	7.6	5.0	1	12.2
MAR. 19...	0800	7600	64	7.2	7.0	30	11.9
MAY 05...	0845	2300	83	7.4	7.0	2	11.4
JULY 17...	1215	472	115	8.0	21.5	1	8.8
SEP. 17...	1320	250	141	8.2	20.0	--	9.8

11342000 SACRAMENTO RIVER AT DELTA, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	14.5	11.5	9.5	9.0	8.0	5.0	4.0	4.0	3.5	7.5	7.0
2	16.0	15.0	12.0	10.0	8.5	8.0	4.0	3.0	4.0	3.5	7.5	7.0
3	16.5	15.0	12.0	10.0	9.0	8.0	3.5	3.0	4.0	3.5	7.5	6.5
4	16.0	14.5	11.5	10.0	9.5	8.5	3.5	3.0	5.0	4.0	8.5	6.5
5	16.0	14.0	12.0	10.0	9.0	8.5	3.0	3.0	5.0	4.5	7.5	7.0
6	16.5	14.0	11.0	10.5	9.5	8.5	3.0	3.0	5.5	5.0	7.5	7.0
7	16.5	14.0	10.5	10.0	9.5	8.0	3.5	3.0	5.5	5.0	7.5	7.0
8	15.0	14.0	11.0	9.5	9.0	8.0	4.0	3.5	6.0	5.5	7.5	5.5
9	15.5	13.5	11.0	9.5	8.5	7.5	3.5	3.0	6.0	6.0	---	---
10	15.5	13.0	11.5	10.0	8.5	7.5	3.5	3.5	6.0	5.5	---	---
11	15.0	13.0	11.5	9.5	8.0	8.0	4.5	3.0	6.5	6.0	---	---
12	15.5	13.0	11.0	9.5	8.0	7.5	4.5	3.5	6.5	6.5	---	---
13	15.5	13.0	11.0	9.5	7.5	7.0	5.0	3.0	7.5	6.5	---	---
14	15.5	13.0	11.0	10.0	7.0	7.0	5.0	3.0	8.0	6.5	---	---
15	15.5	13.0	11.0	9.5	7.5	7.0	5.0	3.0	7.5	6.0	---	---
16	15.5	13.0	10.5	9.5	8.0	7.0	5.0	3.5	7.5	6.5	---	---
17	15.0	13.0	9.5	9.0	7.5	6.5	5.0	3.5	8.5	6.0	---	---
18	15.0	12.5	9.5	9.5	6.5	6.0	5.5	4.0	7.0	6.5	---	---
19	14.0	12.5	10.0	9.0	7.0	6.0	6.0	4.5	6.5	6.0	8.5	7.0
20	14.0	12.0	9.5	9.0	7.0	6.5	6.0	4.5	8.0	6.0	8.5	6.5
21	14.0	12.0	9.5	9.5	6.5	6.0	6.0	4.0	8.0	6.0	7.5	6.5
22	14.0	12.0	10.0	9.0	6.0	5.5	5.5	4.5	8.5	6.5	7.0	6.0
23	13.5	11.5	10.5	9.0	6.5	5.5	5.5	4.0	9.0	7.0	7.0	6.5
24	13.5	11.5	10.0	9.0	6.0	5.0	6.0	4.5	9.0	7.0	6.5	6.5
25	13.0	11.5	10.0	9.0	6.5	5.5	5.0	4.0	8.5	7.0	8.0	6.5
26	12.0	11.0	10.0	9.0	5.5	5.5	5.0	4.0	7.5	7.0	8.0	6.5
27	12.5	11.0	10.0	8.5	5.5	5.0	5.0	3.0	7.0	7.0	8.0	6.0
28	11.0	10.5	10.0	9.0	5.5	4.5	4.0	3.5	8.0	7.0	7.5	6.0
29	12.0	10.0	9.5	8.5	4.5	4.0	5.0	3.0	---	---	8.5	5.5
30	11.0	10.5	9.5	8.0	5.0	4.0	5.0	3.5	---	---	8.0	6.0
31	10.5	10.5	---	---	5.0	4.0	4.0	3.5	---	---	8.0	6.5
MONTH	17.0	10.0	12.0	8.0	9.5	4.0	6.0	3.0	9.0	3.5	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	6.0	11.0	8.5	10.5	10.0	---	---	21.0	18.5	19.5	15.5
2	7.5	6.0	10.0	9.0	11.0	10.0	---	---	21.0	18.5	19.0	15.0
3	6.5	6.5	9.5	9.0	11.5	9.5	---	---	21.0	19.0	19.5	15.0
4	7.0	6.0	9.5	8.5	12.0	9.5	---	---	21.0	19.0	20.5	15.5
5	6.5	6.0	10.5	8.5	12.0	10.0	---	---	20.0	18.0	20.5	16.0
6	7.5	6.0	11.0	9.0	12.0	10.5	---	---	20.0	18.0	20.5	16.0
7	7.0	6.5	11.0	9.0	12.0	10.5	---	---	20.0	18.0	20.5	16.0
8	8.0	7.0	11.0	9.0	12.5	11.0	---	---	20.5	18.0	20.5	16.0
9	9.0	6.5	11.0	9.5	13.0	11.0	20.5	18.5	20.5	18.5	19.0	17.5
10	8.5	7.5	9.5	8.5	13.5	11.5	21.0	19.0	20.5	18.0	19.0	16.5
11	9.0	6.5	10.5	8.5	13.5	11.5	21.0	19.0	20.5	18.5	21.0	16.5
12	9.5	7.0	11.5	9.0	13.5	11.5	21.0	19.5	20.5	18.5	21.0	17.0
13	8.5	7.0	11.5	9.0	14.5	12.5	21.0	18.5	21.0	19.0	21.5	18.0
14	8.0	6.5	10.5	9.5	14.5	12.5	20.5	19.0	20.5	19.0	20.0	17.5
15	7.5	6.0	10.5	9.0	14.0	12.5	19.5	18.5	21.0	19.0	19.0	17.0
16	8.5	6.5	11.0	9.0	14.5	13.0	20.5	18.5	20.5	19.0	20.0	16.0
17	9.0	7.0	11.5	9.0	14.0	13.0	20.5	19.0	20.5	19.0	19.5	16.0
18	8.5	7.5	11.5	9.5	14.0	12.0	20.5	19.0	19.5	18.5	19.5	15.5
19	9.5	8.0	10.5	9.5	---	---	21.0	19.0	20.5	19.0	19.5	15.5
20	10.0	7.5	10.5	9.0	---	---	21.0	19.0	21.0	19.0	20.0	16.0
21	9.5	7.5	10.5	9.0	---	---	21.5	19.0	21.0	19.5	19.5	15.5
22	8.5	8.0	11.0	9.5	---	---	21.0	19.0	21.5	19.5	18.5	15.0
23	8.5	7.5	11.5	9.5	---	---	21.5	19.5	21.5	20.0	19.0	15.0
24	9.0	8.0	11.5	9.5	---	---	21.5	19.5	22.0	20.0	19.0	15.0
25	8.5	8.0	11.5	9.5	---	---	22.0	19.5	22.0	20.0	19.0	15.0
26	10.0	7.5	11.0	9.5	---	---	22.0	19.5	22.0	18.0	18.5	15.0
27	10.5	8.5	11.0	9.0	---	---	21.0	19.0	19.0	16.0	18.0	14.5
28	10.5	8.0	11.0	9.0	---	---	21.0	19.0	19.0	15.0	18.0	14.0
29	10.5	8.5	11.5	9.5	---	---	20.5	18.5	19.5	15.5	18.0	14.0
30	10.5	8.5	12.0	9.5	---	---	20.5	18.0	19.5	15.5	18.0	14.0
31	---	---	11.5	9.5	---	---	21.0	18.5	19.0	15.0	---	---
MONTH	10.5	6.0	12.0	8.5	---	---	---	---	22.0	15.0	21.5	14.0
YEAR	22.0	3.0										

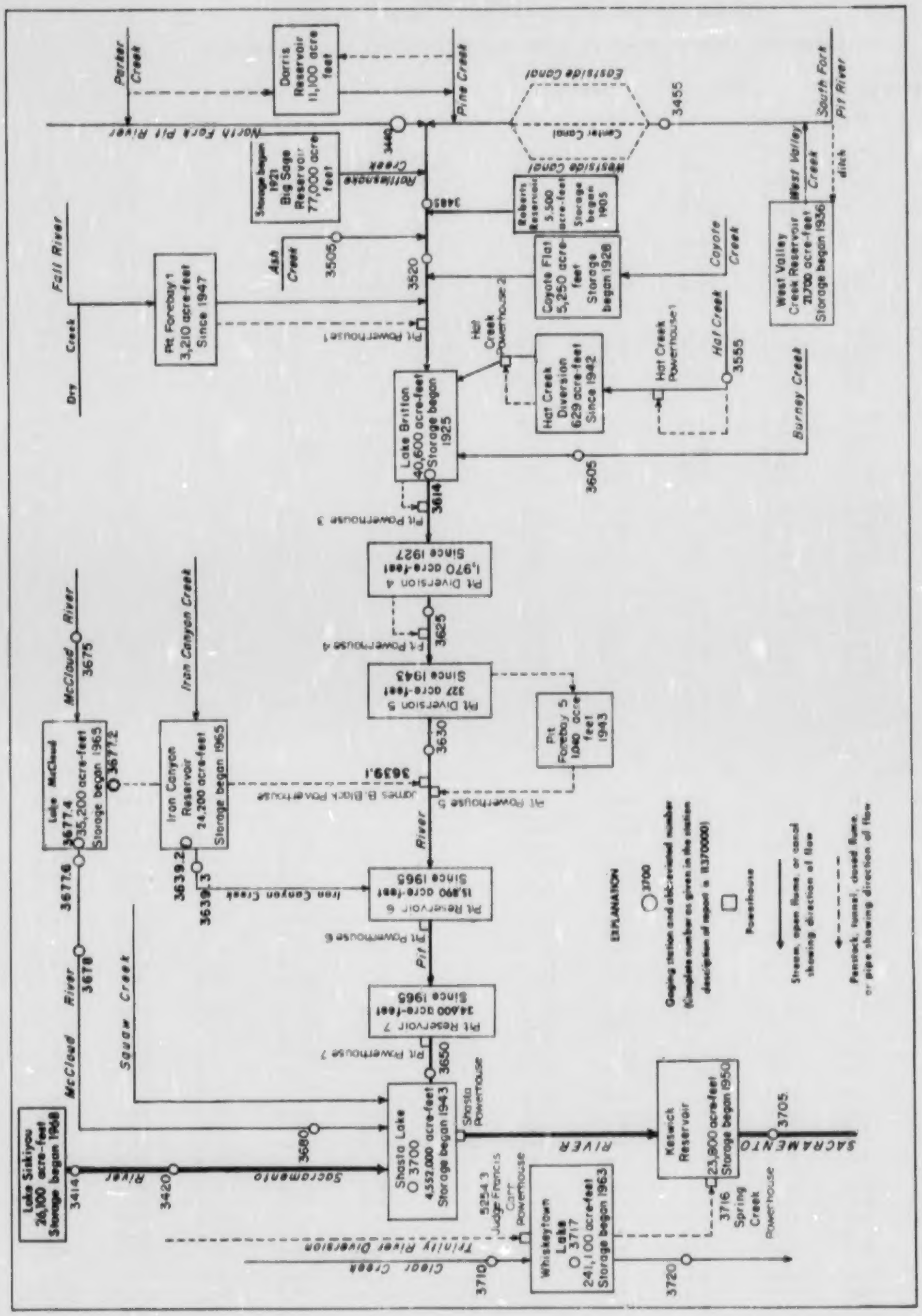

Lake Siskiyou 26,100 acre-feet Storage began 1968
3414
Sacramento River
3420
McCloud River
3680
Squaw Creek
Shasta Lake ○ 3700 4,552,000 acre-feet Storage began 1943
Shasta Powerhouse
Keswick Reservoir 23,800 acre-feet Storage began 1950
3705
SACRAMENTO RIVER
Whiskeytown Lake ○ 3717 241,100 acre-feet Storage began 1963
5254.3 Judge Francis Carr Powerhouse
3716 Spring Creek Powerhouse
Trinity River Diversion
Clear Creek
3710
3720
3650
Pit Powerhouse 7
Pit Reservoir 7 34,600 acre-feet Since 1965
Pit River
3678
3677.6
Lake McCloud 3677.4 35,200 acre-feet Storage began 1965
3677.2
McCloud River
3675
Iron Canyon Reservoir 24,200 acre-feet Storage began 1965
Iron Canyon Creek
3639.2
3639.3
Pit Powerhouse 6
Pit Reservoir 6 15,890 acre-feet Since 1965
James B. Black Powerhouse
3639.1
Pit Powerhouse 5
Pit Forebay 5 1,040 acre-feet 1943
3630
Pit Diversion 5 327 acre-feet Since 1943
3625
Pit Powerhouse 4
Pit Diversion 4 1,970 acre-feet Since 1927
Pit Powerhouse 3
3614
Lake Britton 40,600 acre-feet Storage began 1925
3605
Burney Creek
Hat Creek Diversion 629 acre-feet Since 1942
Hat Creek Powerhouse 2
Hat Creek Powerhouse 1
Hat Creek
3555
Pit Powerhouse 1
Pit Forebay 1 3,210 acre-feet Since 1947
Dry Creek
Fall River
3520
Coyote Flat 5,250 acre-feet Storage began 1928
Coyote Creek
Ash Creek
3505
West Valley Creek Reservoir 21,700 acre-feet Storage began 1936
West Valley Creek
ditch
Roberts Reservoir 5,500 acre-feet Storage began 1905
3485
Storage began 1921 Big Sage Reservoir 77,000 acre-feet
Rattlesnake Creek
3440
Westside Canal
Center Canal
Eastside Canal
3455
South Fork Pit River
North Fork Pit River
Pine Creek
Dorris Reservoir 11,100 acre feet
Parker Creek
EXPLANATION
○ 3700 Gaging station and abbreviated number (Complete number as given in the station description of report is 11370000)
□ Powerhouse
Stream, open flume, or canal showing direction of flow
Penstock, tunnel, closed flume, or pipe showing direction of flow

FIGURE 4.--Schematic diagram showing diversions and storage in Pit and McCloud river basins.

11344000 NORTH FORK PIT RIVER AT ALTURAS, CALIF.

LOCATION.--Lat 41°28'56", long 120°32'16", in SE¼NW¼ sec.13, T.42 N., R.12 E., Modoc County, on right bank 10 ft (3 m) downstream from Estes Street bridge in Alturas, and 1.2 mi (1.9 km) upstream from confluence of North and South Forks.

DRAINAGE AREA.--212 mi² (549 km²), excluding Goose Lake basin.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,345.00 ft (1,324.356 m) above mean sea level. Since Apr. 10, 1973, a supplementary water-stage recorder for winter periods is located 0.25 mi (0.40 km) upstream and 45 ft (14 m) upstream from a concrete weir.

EXTREMES.--Current year: Maximum discharge, 870 ft³/s (24.6 m³/s) Mar. 25 (gage height, 6.02 ft or 1.835 m); minimum daily, 0.25 ft³/s (0.007 m³/s) Oct. 13.
Period of record: Maximum discharge, 1,800 ft³/s (51.0 m³/s) Feb. 29, 1972 (gage height, 11.90 ft or 3.627 m), from rating curve extended above 550 ft³/s (15.6 m³/s) on basis of estimate of peak discharge by flow-over-dam computation; minimum daily, 0.19 ft³/s (0.005 m³/s) Oct. 1-5, 1973.

REMARKS.--Records good except those for the summer months, which are fair. Flow is regulated by many small irrigation ponds and Dorris Reservoir, capacity, 11,100 acre-ft (13.7 hm³). Diversions above station for irrigation of about 7,100 acres (28.7 km²). See schematic diagram of Pit and McCloud River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	13	13	12	13	464	97	213	220	32	1.1	6.4
2	.31	14	15	12	12	504	95	286	218	34	1.7	6.0
3	.31	13	16	13	13	454	95	401	197	26	2.3	5.7
4	.31	20	26	13	14	321	104	351	138	28	2.6	4.9
5	.31	15	16	12	14	296	118	339	147	27	2.3	4.3
6	.31	15	22	12	14	464	107	249	159	26	2.1	1.3
7	.28	24	15	13	14	431	125	249	159	22	2.4	.84
8	.28	43	13	23	18	321	149	306	132	18	2.8	1.7
9	.31	16	11	20	58	329	272	406	114	10	3.9	2.8
10	.31	13	10	13	76	256	304	496	103	6.3	2.5	2.2
11	.31	12	13	13	47	183	200	566	98	9.2	2.7	1.1
12	.28	15	22	12	72	114	156	561	81	12	1.5	.57
13	.25	12	16	12	266	110	154	542	74	10	.56	1.2
14	3.4	9.8	14	13	245	86	287	629	74	8.0	.43	2.0
15	8.2	6.3	16	12	133	90	331	631	72	9.5	.44	2.6
16	2.5	4.9	24	13	82	81	192	518	66	5.9	.47	2.8
17	.75	4.4	19	13	47	74	154	504	49	3.6	.49	2.5
18	13	6.1	15	9.6	26	98	143	489	57	7.0	.51	4.2
19	9.1	8.2	13	13	38	311	196	474	113	9.1	.52	11
20	5.2	8.8	15	13	43	247	194	361	206	12	.47	10
21	2.4	9.1	38	13	33	141	171	289	109	11	.39	5.4
22	3.1	9.1	17	12	31	89	192	268	73	11	.40	6.3
23	1.1	9.1	16	14	28	89	190	274	51	10	.41	5.2
24	.49	9.1	15	18	31	106	217	296	47	6.0	.41	3.8
25	.49	23	14	33	37	569	354	252	53	.94	2.3	3.4
26	.52	15	18	40	51	312	321	222	37	1.3	3.6	2.8
27	.67	12	13	18	159	196	219	231	23	1.1	2.9	2.2
28	1.7	11	17	15	416	105	188	182	36	.74	6.6	2.0
29	5.8	11	13	18	---	97	177	206	32	.71	7.8	1.9
30	18	12	12	16	---	138	192	210	28	.58	7.5	1.9
31	16	---	12	14	---	148	---	217	---	.64	7.4	---
TOTAL	96.30	393.9	509	477.6	2031	7224	5694	11218	2958	359.61	71.50	109.01
MEAN	3.11	13.1	16.4	15.4	72.5	233	190	362	98.6	11.6	2.31	3.63
MAX	18	43	38	40	416	569	354	631	220	34	7.8	11
MIN	.25	4.4	10	9.6	12	74	95	182	23	.58	.39	.57
AC-FT	191	781	1010	947	4030	14330	11290	22250	5870	713	142	216

CAL YR 1974 TOTAL 25029.59 MEAN 68.6 MAX 731 MIN .21 AC-FT 49650
WTR YR 1975 TOTAL 31141.92 MEAN 85.3 MAX 631 MIN .25 AC-FT 61770

11345500 SOUTH FORK PIT RIVER NEAR LIKELY, CALIF.

LOCATION.--Lat 41°13'51", long 120°26'10", in NE¼SE¼ sec.11, T.39 N., R.13 E., Modoc County, on left bank 250 ft (76 m), revised, downstream from highway bridge, 1.4 mi (2.3 km) downstream from West Valley Creek, and 3.5 mi (5.6 km) east of Likely.

DRAINAGE AREA.--247 mi^2 (640 km^2).

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 4,508 ft (1,374 m) above mean sea level. Prior to Oct. 1, 1931, at site 1,000 ft (305 m) downstream at different datum.

AVERAGE DISCHARGE.--47 years, 79.8 ft^3/s (2.260 m^3/s), 57,820 acre-ft/yr (71.3 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 664 ft^3/s (18.8 m^3/s) June 3 (gage height, 4.59 ft or 1.399 m); minimum daily, 17 ft^3/s (0.48 m^3/s) Dec. 29.

Period of record: Maximum discharge, 1,620 ft^3/s (45.9 m^3/s) June 2, 1971 (gage height, 6.05 ft or 1.844 m); minimum, 0.2 ft^3/s (0.006 m^3/s) Feb. 3, 1941.

REMARKS.--Records good except those for the winter periods, which are fair. Flow partly regulated by West Valley Creek Reservoir beginning in May 1937, usable capacity, 21,700 acre-ft (26.8 hm^3). Diversions for irrigation of about 3,800 acres (1,538 hm^2) above station. See schematic diagram of Pit and McCloud River basins. Chemical-quality data for this station are published in the partial-record section of this report.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1965: 1932, 1938(M), 1952(M). WRD Calif. 1971: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	38	28	21	20	86	40	38	587	158	187	187
2	70	35	28	21	20	95	38	47	615	146	181	188
3	70	35	30	23	21	94	34	64	641	139	171	179
4	69	34	35	28	22	98	29	66	628	134	170	174
5	70	34	29	30	25	110	28	67	601	138	172	171
6	70	34	31	33	27	127	25	61	595	135	166	167
7	55	36	29	37	32	146	24	51	579	127	158	166
8	28	38	26	38	42	150	27	60	549	124	157	166
9	28	35	28	38	49	126	31	80	504	110	168	164
10	28	36	26	38	46	89	34	102	450	133	178	165
11	28	35	25	38	42	62	32	119	405	186	178	168
12	28	35	29	37	44	49	38	152	366	175	177	163
13	29	34	28	36	62	42	42	216	343	167	174	162
14	30	34	27	36	58	33	94	305	327	165	182	173
15	30	33	38	34	43	35	72	372	320	169	186	191
16	29	32	39	35	38	34	41	417	312	194	183	199
17	29	32	35	38	34	31	33	459	295	184	192	197
18	28	36	29	38	30	37	35	496	287	176	231	195
19	26	34	35	37	28	77	60	537	346	156	249	170
20	26	33	33	36	30	57	48	538	415	110	241	133
21	26	33	33	39	34	43	42	484	346	105	232	136
22	28	32	30	38	36	28	41	452	296	97	235	135
23	27	31	27	34	38	28	39	474	269	92	222	135
24	28	34	25	37	40	30	43	523	256	88	218	131
25	31	32	23	39	38	70	67	517	271	114	213	130
26	31	29	21	39	38	48	64	502	258	134	209	129
27	32	32	19	38	54	38	51	518	228	159	206	127
28	37	30	18	35	72	30	39	534	208	182	201	124
29	40	28	17	31	---	28	36	551	193	205	203	124
30	37	28	19	27	---	61	38	563	179	216	198	123
31	41	---	20	23	---	65	---	567	---	202	187	---
TOTAL	1199	1002	860	1052	1063	2047	1265	9932	11669	4620	6025	4772
MEAN	38.7	33.4	27.7	33.9	38.0	66.0	42.2	320	389	149	194	159
MAX	70	38	39	39	72	150	94	567	641	216	249	199
MIN	26	28	17	21	20	28	24	38	179	88	157	123
AC-FT	2380	1990	1710	2090	2110	4060	2510	19700	23150	9160	11950	9470

CAL YR 1974 TOTAL 38435.0 MEAN 105 MAX 605 MIN 8.0 AC-FT 76240
WTR YR 1975 TOTAL 45506.0 MEAN 125 MAX 641 MIN 17 AC-FT 90260

11348500 PIT RIVER NEAR CANBY, CALIF.

LOCATION.--Lat 41°24'22", long 120°55'36", in NW¼SW¼ sec.10, T.41 N., R.9 E., Modoc County, on right bank at lower end of Warm Spring Valley, 4 mi (6 km) southwest of Canby.

DRAINAGE AREA.--1,431 mi^2 (3,706 km^2), excluding Goose Lake basin.

PERIOD OF RECORD.--January 1904 to December 1905, May 1929 to current year (1929-31 incomplete).

GAGE.--Water-stage recorder. Datum of gage is 4,266 ft (1,300 m) above mean sea level. January 1904 to December 1905, nonrecording gage and May 6, 1929, to Sept. 30, 1931, water-stage recorder, at site 100 ft (30 m) upstream at different datum.

AVERAGE DISCHARGE.--45 years (1905, 1931-75), 253 ft^3/s (7.165 m^3/s), 183,300 acre-ft/yr (226 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,620 ft^3/s (45.9 m^3/s) Mar. 4 (gage height, 5.53 ft or 1.686 m); minimum daily, 25 ft^3/s (0.71 m^3/s) Aug. 14.

Period of record: Maximum discharge observed, 13,000 ft^3/s (368 m^3/s) Mar. 8, 1904 (gage height, 15.0 ft or 4.57 m, site and datum then in use); minimum, 0.1 ft^3/s (0.003 m^3/s) Apr. 29, Aug. 5, Sept. 18, 1934, Aug. 18-21, 1935.

REMARKS.--Records excellent. Flow regulated by many small reservoirs, total capacity now, about 144,000 acre-ft (178 hm^3). Diversions for irrigation of about 39,000 acres (158 km^2) above station. See schematic diagram of Pit and McCloud River basins.

REVISIONS (WATER YEARS).--WSP 1445: 1904, 1935(M), 1936, 1937(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	87	82	82	79	1060	482	694	659	174	42	144
2	90	100	86	80	66	1400	377	691	637	268	40	132
3	80	114	100	71	83	1550	337	764	717	299	44	116
4	85	117	132	70	82	1480	349	885	767	231	50	86
5	80	116	117	73	95	1150	391	880	774	166	56	83
6	78	113	114	80	108	1120	460	848	732	175	61	62
7	73	104	109	97	99	1300	449	752	722	182	63	116
8	66	116	105	153	121	1430	465	727	706	179	65	164
9	60	120	102	166	187	1230	490	742	734	147	63	150
10	55	114	94	175	399	1110	540	814	703	162	62	137
11	53	104	109	142	400	889	820	885	637	157	61	121
12	58	99	153	120	453	639	740	961	532	122	58	107
13	60	101	131	111	892	414	880	1010	421	92	27	121
14	53	98	122	109	1270	344	1050	1010	356	95	25	129
15	47	92	118	107	1150	292	1400	1100	340	79	61	132
16	51	86	112	115	641	283	1300	1170	309	78	61	123
17	83	81	108	117	342	252	1040	1170	298	87	73	115
18	87	80	106	117	246	266	823	1150	294	86	121	112
19	83	81	112	112	223	405	749	1140	279	82	114	107
20	64	86	120	115	246	637	769	1150	387	98	97	113
21	70	154	138	118	260	609	807	1090	543	108	92	120
22	74	116	141	124	220	400	743	1030	600	167	147	127
23	79	100	118	115	195	325	717	981	563	175	193	130
24	67	89	104	136	185	340	753	882	487	122	172	140
25	60	82	109	183	208	600	970	792	385	82	176	146
26	58	91	109	201	240	1100	1120	758	344	59	196	140
27	66	89	96	250	362	920	1170	783	258	42	182	128
28	76	82	96	156	692	625	993	795	125	40	204	144
29	86	81	86	135	---	407	834	703	85	36	189	160
30	67	80	85	115	---	386	734	632	148	40	167	122
31	69	---	83	95	---	456	---	634	---	38	158	---
TOTAL	2163	2973	3397	3840	9536	23419	22672	27623	14542	3868	3120	3727
MEAN	69.8	99.1	110	124	341	755	756	891	485	125	101	124
MAX	90	154	153	250	1270	1550	1400	1170	774	299	204	164
MIN	47	80	82	70	66	252	337	632	85	36	25	62
AC-FT	4290	5900	6740	7620	18910	46450	44970	54790	28840	7670	6190	7390

CAL YR 1974 TOTAL 115462.0 MEAN 316 MAX 2610 MIN 9.0 AC-FT 229000
WTR YR 1975 TOTAL 120880.0 MEAN 331 MAX 1550 MIN 25 AC-FT 239000

11348500 PIT RIVER NEAR CANBY, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water years 1951-58 (partial-record station), October 1958 to September 1971, water year 1972 (partial-record station), October 1972 to current year.
Water temperatures: March 1965 to current year.
Sediment records: Water years 1957-61, 1967-70 (partial-record station).

EXTREMES.--Current year:
Water temperatures: Maximum, 28.0°C July 26; minimum, freezing point on many days during winter period.
Period of record:
Water temperatures: Maximum (1965-71, 1972 to current year), 31.0°C June 28, 1973; minimum (1965-66, 1967-69, 1970 to current year), freezing point on many days during most years.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. Probe affected by ice Dec. 19-31, Jan. 12-14, 27-30.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
MAR.										
19...	1320	400	4100	90	15	97	0	80	5.7	.13
MAY										
06...	1400	842	3800	70	9.5	77	0	63	2.4	.13

DATE	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
MAR.									
19...	.70	.14	67	0	.8	0	0	0	0
MAY									
06...	.40	.10	53	0	.6	100	0	10	0

DATE	TIME	DISCHARGE (CFS)	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
OCT.								
08...	1530	--	64	293	8.2	15.0	32	10.0
NOV.								
07...	0810	--	103	303	7.9	5.0	114	11.1
DEC.								
10...	0745	--	95	236	8.1	2.0	11	11.4
JAN.								
14...	0830	--	108	308	7.4	.0	10	11.0
FEB.								
18...	1630	--	275	268	7.6	1.5	35	11.0
MAR.								
19...	1320	--	400	182	7.7	7.0	50	10.1
APR.								
15...	1700	1400	--	148	7.6	8.0	70	9.8
MAY								
06...	1400	--	842	145	7.6	9.0	26	10.3
JUNE								
03...	1630	--	782	141	7.6	21.5	22	7.8
JULY								
16...	0825	--	75	215	8.2	20.0	3	7.2
AUG.								
07...	0650	--	62	292	7.9	--	15	6.3
SEP.								
17...	0710	--	117	243	8.0	--	19	7.3

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	12.0	7.5	4.5	4.0	0.0	1.5	0.0	1.5	0.0	6.5	4.5
2	18.0	14.0	6.0	3.5	3.0	1.5	1.5	0.0	0.0	0.0	6.5	3.5
3	18.0	14.0	8.5	2.5	6.5	2.5	1.0	0.0	0.5	0.0	7.5	4.0
4	15.0	12.5	8.5	3.5	5.5	3.5	1.0	0.0	0.5	0.0	8.5	4.0
5	13.5	10.5	9.0	3.5	4.0	2.0	0.0	0.0	0.5	0.0	8.0	4.5
6	14.0	9.0	8.5	4.5	4.5	3.0	0.0	0.0	0.5	0.0	8.0	6.0
7	14.5	8.5	7.5	5.5	7.0	3.5	0.0	0.0	1.0	0.5	7.5	5.5
8	14.0	10.5	8.5	4.0	5.5	2.0	0.0	0.0	1.0	0.5	8.5	4.5
9	14.5	10.5	9.0	4.5	5.0	1.5	0.0	0.0	1.0	0.5	7.5	5.5
10	14.0	10.0	10.0	6.0	4.0	1.0	0.0	0.0	0.5	0.0	8.0	5.5
11	14.5	10.5	10.0	5.0	4.0	2.5	0.5	0.0	3.5	0.5	8.5	5.5
12	14.0	10.0	9.0	5.0	4.0	2.0	---	---	3.0	2.0	8.5	4.5
13	15.0	10.0	9.5	4.5	2.0	0.0	---	---	3.0	1.5	7.5	5.5
14	16.0	10.0	10.0	5.0	2.5	1.0	---	---	2.0	0.5	9.5	4.0
15	16.5	10.0	10.0	5.5	4.5	2.0	0.5	0.0	3.0	0.0	9.0	6.5
16	15.5	10.5	8.5	4.0	4.5	3.0	1.0	0.0	2.0	0.0	8.0	5.5
17	14.0	11.0	7.5	4.0	4.5	1.5	1.0	0.0	1.5	0.0	7.0	4.5
18	14.5	10.5	6.0	5.0	2.0	0.5	1.0	0.0	1.0	0.0	10.0	5.5
19	14.0	11.0	7.0	4.0	---	---	2.5	0.5	1.0	0.0	9.0	7.0
20	13.5	10.0	8.0	3.5	---	---	3.5	0.5	1.0	0.0	8.0	5.5
21	11.0	8.0	7.5	5.5	---	---	3.0	0.0	1.0	0.0	7.0	3.5
22	11.0	7.5	6.0	3.0	---	---	1.5	0.0	3.0	0.0	4.5	2.0
23	11.0	7.5	6.0	1.5	---	---	1.0	0.0	5.5	0.0	5.0	3.0
24	10.5	7.0	6.5	2.0	---	---	2.5	0.5	8.0	2.0	6.0	4.0
25	12.0	8.0	5.5	3.5	---	---	2.5	0.5	8.5	3.5	7.5	4.5
26	11.0	8.5	5.5	1.0	---	---	1.5	0.0	7.0	4.0	6.5	2.5
27	10.5	9.5	5.0	2.5	---	---	---	---	7.5	5.5	5.5	2.0
28	10.0	9.0	3.5	0.5	---	---	---	---	7.5	5.5	5.5	1.5
29	9.0	7.0	3.5	0.0	---	---	---	---	---	---	9.0	3.0
30	8.5	7.0	4.0	0.0	---	---	---	---	---	---	11.5	6.5
31	8.0	6.5	---	---	---	---	2.0	0.0	---	---	9.5	7.0
MONTH	18.0	6.5	10.0	0.0	---	---	---	---	8.5	0.0	11.5	1.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	5.0	16.0	10.0	23.5	19.0	20.0	16.0	24.5	17.0	19.0	17.0
2	8.5	6.5	15.0	11.5	23.0	19.0	21.5	17.0	25.5	18.0	19.0	16.5
3	7.0	4.5	13.5	9.5	22.5	17.0	24.0	17.5	25.5	19.0	20.0	17.0
4	7.0	3.0	9.5	5.5	23.5	17.0	23.5	19.0	25.5	19.5	21.5	17.0
5	8.5	4.0	6.5	4.5	24.5	19.0	25.0	20.5	24.5	19.5	22.0	17.5
6	8.0	5.0	11.0	3.5	25.0	20.0	26.0	21.5	23.5	19.0	23.0	18.0
7	6.5	4.0	14.5	7.0	24.0	20.0	25.5	22.0	23.0	18.0	21.0	18.0
8	8.5	4.5	17.0	10.5	23.0	17.5	26.5	22.0	24.0	18.0	21.0	17.5
9	11.0	6.0	18.0	12.5	22.5	17.0	27.0	23.0	24.5	19.0	20.0	18.0
10	10.0	8.0	17.5	12.5	23.5	17.0	27.5	23.5	25.5	19.5	20.0	18.5
11	9.5	7.0	16.5	11.0	24.0	18.0	27.5	23.0	26.5	20.0	20.0	17.5
12	12.5	6.5	17.5	10.0	25.0	19.0	28.0	24.0	26.0	20.0	21.0	18.0
13	13.0	9.5	19.5	11.5	25.5	20.5	27.5	23.5	26.0	19.5	21.0	19.0
14	10.5	8.0	19.5	13.0	26.5	21.5	27.0	23.0	25.0	17.5	20.5	18.5
15	9.5	5.0	17.5	12.0	26.5	22.5	24.5	20.0	24.0	19.5	20.0	18.0
16	10.0	4.5	18.5	11.0	25.0	21.0	23.0	19.5	23.5	19.0	20.0	17.5
17	9.0	5.0	20.0	12.0	22.0	16.5	23.5	20.5	21.5	19.0	19.0	17.0
18	10.0	5.0	20.5	13.5	16.5	14.0	24.0	19.0	19.0	18.0	19.5	16.5
19	11.0	8.0	19.0	13.0	14.0	13.0	25.5	20.5	19.0	17.5	20.5	17.5
20	12.5	7.0	13.0	7.5	19.0	13.0	25.5	21.0	20.5	16.5	20.5	17.5
21	14.0	8.5	13.0	7.0	21.0	14.5	25.0	21.5	21.0	18.5	19.0	16.5
22	13.5	10.0	15.0	9.0	21.5	16.5	25.5	21.5	20.5	18.0	18.5	16.0
23	12.0	8.5	17.5	11.0	21.0	18.0	26.0	20.0	20.0	19.0	18.5	16.0
24	10.5	6.5	17.5	12.5	20.0	13.5	26.5	22.5	21.0	18.0	18.5	16.5
25	6.5	4.0	17.5	11.0	17.0	12.0	27.0	23.5	21.0	18.5	18.5	16.5
26	6.0	3.5	17.0	11.5	18.5	13.5	28.0	21.5	22.0	19.0	18.5	16.5
27	9.5	3.5	19.5	13.5	19.5	16.0	27.5	22.0	21.0	18.5	18.5	16.5
28	11.5	5.0	20.0	14.0	20.0	15.0	26.5	21.5	19.0	17.0	17.5	15.5
29	14.0	7.5	21.5	15.5	21.5	17.0	24.5	20.0	19.0	16.5	17.0	16.0
30	15.0	9.0	23.5	16.5	20.5	17.5	23.5	17.5	19.0	16.5	18.0	15.5
31	---	---	24.5	18.0	---	---	24.0	16.0	18.5	16.0	---	---
MONTH	15.0	3.0	24.5	3.5	26.5	12.0	28.0	16.0	26.5	16.0	23.0	15.5

11350500 ASH CREEK AT ADIN, CALIF.

LOCATION.--Lat 41°11'54", long 120°56'32", in SE¼SW¼ sec.21, T.39 N., R.9 E., Modoc County, on left bank 300 ft (91 m) upstream from highway bridge at Adin, and 0.4 mi (0.6 km) upstream from Butte Creek.

DRAINAGE AREA.--258 mi² (668 km²).

PERIOD OF RECORD.--March 1904 to December 1905, October 1928 to November 1932, October 1957 to current year. Records of daily discharge for Oct. 19-31, 1928, are in error and should not be used.

GAGE.--Water-stage recorder. Altitude of gage is 4,190 ft (1,277 m), estimated, on basis of bench mark 300 ft (91 m) downstream. Prior to Sept. 12, 1957, water-stage recorder or nonrecording gage at sites within 1 mi (1.6 km) of present site, at different datums.

AVERAGE DISCHARGE.--23 years (1904-5, 1928-32, 1957-75), 79.1 ft³/s (2.240 m³/s), 57,310 acre-ft/yr (70.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 889 ft³/s (25.2 m³/s) Apr. 24 (gage height, 9.21 ft or 2.807 m); minimum daily, 14 ft³/s (0.40 m³/s) Sept. 6, 7.

Period of record: Maximum discharge, 2,950 ft³/s (83.5 m³/s) Jan. 24, 1970 (gage height, 14.69 ft or 4.478 m in gage well, 15.24 ft or 4.645 m, from floodmarks); no flow for part of Aug. 26, 1962.

REMARKS.--Small diversions above station for irrigation. Flow regulated by many small reservoirs, total capacity, 4,732 acre-ft (5.83 hm³). See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1966: 1958(M), 1960(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	40	36	32	41	346	217	350	94	27	31	27
2	24	36	36	29	41	394	206	378	91	26	30	27
3	25	34	38	32	39	433	202	433	86	26	29	28
4	25	34	44	40	39	388	197	401	73	26	29	28
5	26	34	40	39	38	325	224	349	68	28	29	19
6	26	34	38	38	38	496	204	295	63	26	28	14
7	26	36	38	40	36	420	177	280	56	25	28	14
8	27	37	37	49	44	435	194	288	54	24	29	17
9	29	38	36	42	101	477	204	312	49	24	29	18
10	28	35	36	39	121	329	333	338	46	24	29	22
11	27	35	37	38	124	225	328	351	41	24	28	24
12	26	35	40	37	320	179	318	353	40	25	26	22
13	30	35	40	36	673	161	338	351	37	26	27	20
14	28	35	42	36	332	131	551	369	36	27	27	22
15	27	34	44	36	137	138	435	374	34	30	28	21
16	32	34	46	37	94	150	314	332	32	34	29	23
17	34	34	42	38	69	136	249	322	31	32	29	21
18	32	38	39	39	65	217	227	295	33	31	44	19
19	30	36	38	40	66	533	395	280	44	36	35	19
20	29	34	41	42	66	335	376	241	55	28	31	20
21	30	34	44	42	61	230	399	206	37	25	30	21
22	30	35	39	41	58	187	401	201	31	23	31	20
23	31	34	34	47	67	192	412	191	27	28	29	22
24	34	34	30	64	87	244	557	175	36	36	29	24
25	35	41	36	70	137	573	608	162	46	31	29	23
26	33	38	36	65	161	312	475	140	40	29	26	24
27	33	37	37	43	296	245	383	132	34	28	28	24
28	41	36	32	36	374	183	328	125	31	28	27	24
29	38	35	31	37	---	186	320	116	29	29	24	27
30	35	36	36	33	---	268	333	103	29	30	26	28
31	43	---	30	36	---	292	---	96	---	31	27	---
TOTAL	938	1068	1173	1273	3725	9160	9905	8339	1403	867	901	662
MEAN	30.3	35.6	37.8	41.1	133	295	330	269	46.8	28.0	29.1	22.1
MAX	43	41	46	70	673	573	608	433	94	36	44	28
MIN	24	34	30	29	36	131	177	96	27	23	24	14
AC-FT	1860	2120	2330	2520	7390	18170	19650	16540	2780	1720	1790	1310

CAL YR 1974 TOTAL 40996.3 MEAN 112 MAX 1810 MIN 9.3 AC-FT 81320
WTR YR 1975 TOTAL 39414.0 MEAN 108 MAX 673 MIN 14 AC-FT 78180

11352000 PIT RIVER NEAR BIEBER, CALIF.

LOCATION.--Lat 41°00'55", long 121°09'15", in NE¼SW¼ sec.27, T.37 N., R.7 E., Modoc County, on right bank 2.2 mi (3.5 km) upstream from Spring Gulch, and 7.4 mi (11.9 km) south of Bieber.

DRAINAGE AREA.--2,475 mi^3 (6,410 km^2), excluding Goose Lake basin.

PERIOD OF RECORD.--January 1904 to September 1908, December 1913 to August 1914, September 1921 to September 1926, November 1928 to September 1931, October 1951 to September 1975 (discontinued). Yearly figures only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 4,080.4 ft (1,243.71 m) above mean sea level. Prior to November 1928, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--37 years (1903-8, 1921-26, 1928-31, 1951-75), 532 ft^3/s (15.07 m^3/s), 385,400 acre-ft/yr (475 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,900 ft^3/s (110 m^3/s) Feb. 15 (gage height, 7.51 ft or 2.289 m); minimum daily, 0.83 ft^3/s (0.024 m^3/s) Aug. 12, 13.
Period of record: Maximum discharge, 33,800 ft^3/s (957 m^3/s) Mar. 19, 1907 (gage height, 16.7 ft or 5.09 m), from rating curve extended above 11,000 ft^3/s (312 m^3/s); no flow at times in some years.

REMARKS.--Records good except those for periods of no gage-height record and those for the winter months, which are fair. Flow regulated by many small reservoirs, total capacity now, 204,000 acre-ft (252 hm^3). Diversions for irrigation of 33,000 acres (134 km^2) between stations near Canby and near Bieber. See schematic diagram of Pit and McCloud River basins.

REVISIONS (WATER YEARS).--WSP 1285: 1907, 1930. WSP 1315-A: 1914(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	90	120	105	172	1930	1240	1780	748	97	29	128
2	56	94	122	90	150	2240	1160	1670	724	120	6.8	101
3	16	110	130	75	136	2580	1040	1620	652	59	2.8	61
4	8.4	130	147	56	131	2720	986	1750	515	92	3.0	44
5	5.6	180	183	50	160	2690	1030	1860	688	92	2.5	34
6	6.4	210	194	51	180	2560	1140	1840	781	88	2.5	29
7	14	200	173	55	205	2570	1200	1780	670	99	2.8	30
8	14	175	163	63	240	2660	1130	1570	754	102	1.9	28
9	37	140	156	88	270	2690	1110	1480	823	42	1.3	9.4
10	65	160	147	115	460	2700	1220	1460	736	173	1.1	8.9
11	234	182	147	150	660	2440	1640	1450	730	272	.91	18
12	71	180	145	193	1080	1910	1820	1520	712	163	.83	50
13	51	170	190	171	1980	1460	1750	1570	535	122	.83	197
14	52	157	240	145	3220	1090	1720	1570	382	108	.91	122
15	53	143	220	145	3600	851	2080	1580	302	80	1.0	108
16	64	137	205	144	2890	742	2360	1610	262	75	1.0	101
17	50	132	195	152	1630	736	2320	1640	124	69	1.0	64
18	42	128	183	155	914	736	2030	1670	104	64	2.8	38
19	60	124	180	159	605	1000	1750	1610	175	52	3.0	46
20	100	124	186	157	495	1840	1750	1530	259	45	1.5	48
21	90	124	202	154	470	1910	1840	1480	269	41	10	80
22	93	151	228	150	434	1410	1830	1460	378	37	6.4	122
23	100	170	240	148	374	1340	1950	1390	530	28	5.6	60
24	105	149	215	152	378	1220	1830	1250	600	29	6.4	40
25	109	140	190	160	410	1670	2280	1170	585	42	34	36
26	100	134	175	182	530	2290	2760	1070	446	31	78	38
27	91	128	170	298	809	2420	2770	1010	362	24	50	42
28	80	134	170	270	1310	2160	2540	914	338	22	61	65
29	84	126	152	205	---	1740	2270	900	312	22	67	90
30	95	128	136	185	---	1200	1980	858	180	38	163	102
31	99	---	121	180	---	1110	---	774	---	62	170	---
TOTAL	2053.2	4358	5427	4403	23893	56615	52526	44756	14676	2390	710.88	1932.3
MEAN	66.2	145	175	142	853	1826	1751	1444	489	77.1	22.9	64.4
MAX	234	210	240	298	3600	2720	2770	1860	823	272	170	197
MIN	5.6	90	120	50	131	736	986	774	104	22	.83	8.9
AC-FT	4070	8630	10760	8730	47390	112300	104200	88770	29110	4740	1410	3830

CAL YR 1974 TOTAL 258513.10 MEAN 708 MAX 9360 MIN 1.5 AC-FT 512800
WTR YR 1975 TOTAL 213732.38 MEAN 586 MAX 3600 MIN .83 AC-FT 423900

NOTE.--No gage-height record Oct. 19 to Nov. 17, Dec. 12 to Jan. 13.

11355010 PIT RIVER BELOW PIT NO. 1 POWERHOUSE, NEAR FALL RIVER MILLS, CALIF.

LOCATION.--Lat 40°59'00", long 121°30'39", in NE¼NW¼ sec.15, T.36 N., R.4 E., Shasta County, on left bank 0.9 mi (1.4 km) downstream from Pit No. 1 powerhouse and 4 mi (6.4 km) southwest of Fall River Mills.

DRAINAGE AREA.--110 mi^2 (285 km^2), excluding Goose Lake basin.

PERIOD OF RECORD.--August to September 1975.

GAGE.--Water-stage recorder. Altitude of gage is 2,840 ft (865.6 m), from topographic map.

EXTREMES.--Maximum discharge during period, 2,800 ft^3/s (79.3 m^3/s) Aug. 26 (gage height, 7.20 ft or 2.195 m); minimum daily, 1,160 ft^3/s (32.9 m^3/s) Aug. 25.

REMARKS.--Records excellent. Flow regulated by many small reservoirs and Pit No. 1 powerplant, total usable reservoir capacity, 210,000 acre-ft (259 hm^3). Many diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, AUGUST AND SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											1470	1660
2											1480	1570
3											1480	1590
4											1490	1580
5											1470	1590
6											1470	1520
7											1480	1510
8											1490	1560
9											1400	1540
10											1530	1520
11											1490	1540
12											1440	1550
13											1480	1550
14											1410	1760
15											1530	1650
16											1470	1660
17											1450	1640
18											1490	1580
19											1550	1550
20											1520	1620
21											1500	1570
22											1490	1600
23											1510	1640
24											1500	1580
25											1160	1550
26											1830	1590
27											1490	1400
28											1570	1600
29											1590	1600
30											1580	1700
31											1690	---
TOTAL											46500	47570
MEAN											1500	1586
MAX											1830	1760
MIN											1160	1400
AC-FT											92230	94360

11555500 HAT CREEK NEAR HAT CREEK, CALIF.

LOCATION.--Lat 40°41'12", long 121°25'25", in NE¼SE¼ sec.28, T.33 N., R.5 E., Shasta County, on right bank 0.8 mi (1.3 km) northeast of Old Station Post Office, and 8 mi (13 km) southeast of Hat Creek Post Office.

DRAINAGE AREA.--162 mi² (420 km²), hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--July 1926 to September 1929, April 1930 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,300 ft (1,311 m), from topographic map. July 1926 to April 1928 at site 0.5 mi (0.8 km) upstream at different datum. May 1928 to July 1965 at site 80 ft (24 km) upstream at datum 2.76 ft (0.841 m) higher.

AVERAGE DISCHARGE.--48 years, 140 ft³/s (3.965 m³/s), 101,400 acre-ft/yr (125 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 376 ft³/s (10.6 m³/s) June 6 (gage height, 4.20 ft or 1.280 m); minimum daily, 143 ft³/s (4.05 m³/s) Aug. 16, Sept. 5, 6.

Period of record: Maximum discharge, 3,320 ft³/s (94.0 m³/s) Dec. 11, 1937 (gage height, 7.75 ft or 2.362 m in gage well, affected by drawdown, site and datum then in use), from rating curve extended above 610 ft³/s (17.3 m³/s) on basis of slope-area measurement of maximum flow; minimum, 67 ft³/s (1.90 m³/s) Sept. 7, 1934.

REMARKS.--Records excellent. Diversions for irrigation of 260 acres (1.05 km²) above station. See schematic diagram of Pit and McCloud River basins.

REVISIONS (WATER YEARS).--WSP 1395: 1938. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	176	180	175	168	165	172	166	164	281	217	168	153
2	176	179	175	168	159	171	166	167	275	213	168	145
3	176	178	179	168	157	169	166	172	277	209	167	145
4	176	178	179	170	158	168	167	169	288	209	164	145
5	176	178	174	172	158	168	167	165	311	209	163	143
6	176	178	176	175	160	168	165	163	328	210	163	143
7	176	180	175	178	166	171	165	162	320	209	161	144
8	174	179	174	179	170	171	165	168	299	205	159	150
9	166	178	173	172	178	170	164	170	290	203	154	153
10	166	178	173	174	172	168	165	174	292	204	150	154
11	165	177	174	176	169	167	163	177	295	204	149	155
12	165	177	176	173	172	166	163	178	299	203	146	153
13	164	177	174	173	173	167	164	181	299	199	145	154
14	164	177	174	173	172	165	165	192	303	198	145	153
15	164	177	173	173	169	165	163	198	315	210	145	154
16	164	177	173	173	169	165	162	193	312	214	143	154
17	166	177	173	173	167	165	162	197	295	199	144	154
18	174	179	172	172	167	168	163	202	265	191	158	150
19	174	177	176	172	171	175	163	209	248	186	160	146
20	174	177	172	172	170	168	163	203	268	181	158	145
21	174	181	172	172	166	165	165	189	263	178	157	145
22	174	178	168	172	166	158	166	193	259	176	156	145
23	174	176	164	172	168	165	167	202	258	172	155	145
24	173	177	161	173	169	172	174	210	252	170	156	144
25	173	178	169	173	168	180	170	211	224	167	156	144
26	173	176	168	174	167	169	167	209	221	165	155	146
27	174	176	172	164	169	169	166	218	221	162	155	146
28	182	175	164	162	171	166	166	230	218	159	156	152
29	178	175	164	165	---	167	163	238	219	158	154	155
30	178	175	166	164	---	169	164	250	223	168	154	155
31	182	---	168	166	---	169	---	272	---	170	154	---
TOTAL	5347	5325	5324	5309	4686	5216	4955	6026	8218	5916	4818	4470
MEAN	172	178	172	171	167	168	165	194	274	191	155	149
MAX	182	181	179	179	178	180	174	272	328	217	168	155
MIN	164	175	161	162	157	158	162	162	218	158	143	143
AC-FT	10610	10560	10560	10530	9290	10350	9830	11950	16300	11730	9560	8870

CAL YR 1974 TOTAL 71405 MEAN 196 MAX 427 MIN 133 AC-FT 141600
WTR YR 1975 TOTAL 65610 MEAN 180 MAX 328 MIN 143 AC-FT 130100

Peak discharge (base, 220 ft³/s).--June 6 (2300) 376 ft³/s (4.20 ft); July 15 (1730) 232 ft³/s (3.50 ft).

11360500 BURNEY CREEK AT PARK AVENUE, NEAR BURNEY, CALIF.
(Formerly published as Burney Creek near Burney)

LOCATION.--Lat 40°52'35", long 121°40'13", in NE¼SE¼ sec.19, T.35 N., R.3 E., Shasta County, on right bank upstream edge of Park Avenue bridge, 0.4 mi (0.6 km) southwest of Burney Post Office, and 3.5 mi (5.6 km) upstream from Goose Creek. Prior to Nov. 7, 1974, at site 1.0 mi (1.6 km) upstream.

DRAINAGE AREA.--94.6 mi^2 (245.0 km^2).

PERIOD OF RECORD.--August 1911 to August 1913 (published as "at Burney"), March 1921 to September 1922, April 1958 to September 1964, October 1965 to September 1974 (published as "near Burney"), October 1974 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 3,180 ft (969 m), from topographic map. August 1911 to August 1913 and March 1921 to September 1922, nonrecording gage or water-stage recorder at different site and datum. April 1958 to September 1964, October 1965 to Nov. 6, 1974, at site 1.0 mi (1.6 km) upstream at different datum.

AVERAGE DISCHARGE.--19 years (1911-13, 1921-22, 1958-64, 1965-75), 72.3 ft^3/s (2.048 m^3/s), 52,380 acre-ft/yr (64.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,070 ft^3/s (30.3 m^3/s) Feb. 13 (gage height, 6.49 ft or 1.978 m); minimum daily, 15 ft^3/s (0.42 m^3/s) Sept. 22-30.
Period of record: Maximum discharge, 4,910 ft^3/s (139 m^3/s) Jan. 23, 1970 (gage height, 15.89 ft or 4.843 m), from rating curve extended above 2,500 ft^3/s (70.8 m^3/s) on basis of contracted-opening measurement of maximum flow; minimum, 3.4 ft^3/s (0.096 m^3/s) Aug. 4, 1961.

REMARKS.--Small diversions upstream for irrigation. Slight regulation probably caused by logging operations.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISISON (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1971: 1970.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	39	25	29	29	83	139	193	165	40	22	19
2	17	37	31	29	30	93	129	203	162	38	21	19
3	17	37	74	29	29	92	140	204	156	36	21	18
4	18	32	51	28	30	87	124	273	148	35	21	18
5	18	33	35	28	30	83	119	214	141	35	20	18
6	18	32	32	27	30	84	114	190	133	33	20	18
7	18	33	30	33	41	100	109	198	128	32	20	17
8	19	33	29	78	66	134	108	203	120	32	18	17
9	20	27	28	40	142	140	107	221	105	31	18	17
10	21	27	27	33	116	120	106	237	99	31	18	17
11	22	26	27	31	97	105	102	256	94	31	18	17
12	23	26	30	30	282	96	110	265	89	30	17	17
13	24	25	29	29	577	90	120	276	85	30	17	17
14	25	25	27	28	209	82	127	293	81	29	17	17
15	26	25	27	28	134	80	113	389	77	29	17	17
16	27	25	27	27	110	78	106	290	74	30	17	16
17	29	26	28	27	94	79	102	278	70	29	17	16
18	29	29	27	27	85	197	101	276	66	28	21	16
19	28	27	26	26	108	515	110	268	63	27	19	16
20	27	27	26	26	94	312	115	246	62	25	18	16
21	29	35	27	26	78	216	121	215	60	25	18	16
22	30	29	26	26	73	190	128	202	57	26	18	15
23	31	29	25	26	70	166	133	194	56	25	18	15
24	33	31	24	26	67	185	279	188	52	23	18	15
25	34	32	26	27	65	378	321	183	51	23	18	15
26	35	30	26	33	64	291	236	175	50	23	18	15
27	37	28	50	30	66	226	198	169	49	22	18	15
28	45	25	33	30	74	183	186	165	47	22	20	15
29	35	25	33	28	---	163	181	162	45	22	19	15
30	35	25	30	30	---	161	186	160	43	23	19	15
31	46	---	31	26	---	159	---	163	---	22	18	---
TOTAL	832	880	967	941	2890	4966	4278	6933	2626	887	579	494
MEAN	26.8	29.3	31.2	30.4	103	160	143	224	87.5	28.6	18.7	16.5
MAX	46	39	74	78	577	515	321	389	165	40	22	19
MIN	16	25	24	26	29	78	101	160	43	22	17	15
AC-FT	1650	1750	1920	1870	5730	9850	8490	13750	5210	1760	1150	980

CAL YR 1974 TOTAL 50773 MEAN 139 MAX 2190 MIN 13 AC-FT 100700
WTR YR 1975 TOTAL 27273 MEAN 74.7 MAX 577 MIN 15 AC-FT 54100

RESERVOIRS IN PIT AND McCLOUD RIVER BASINS, CALIF.

11361400 LAKE BRITTON NEAR BURNEY.--Lat 41°01'20", long 121°40'32", in SW¼SW¼ sec.30, T.37 N., R.3 E., Shasta County, Shasta National Forest, at control house on right bank 200 ft (61 m) upstream from dam on Pit River, 1.1 mi (1.8 km) downstream from Clark Creek, 1.3 mi (2.1 km) northwest of Burney Falls, and 9 mi (14 km) north of Burney. Drainage area, 4,607 mi² (11,932 km²), revised. Period of record, October 1965 to current year. Gage is a remote telemark read once daily. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Extremes for current year: Maximum contents, 14,571 acre-ft (18.0 hm³) Nov. 5, 6 elevation, 2,757.10 ft or 840.364 m); minimum, 2,344 acre-ft (2.89 hm³) Jan. 31 (elevation, 2,746.40 ft or 837.103 m). Extremes for period of record: Maximum contents, 20,445 acre-ft (25.2 hm³) Jan. 25, 1970 (elevation, 2,761.55 ft or 841.720 m); minimum, 719 acre-ft (887,000 m³) Feb. 1, 1968 (elevation, 2,744.75 ft or 836.600 m).

Reservoir is formed by gravity-type concrete dam. Storage began July 15, 1925. Maximum storage, 40,600 acre-ft (50.1 hm³). Record of contents collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project. See schematic diagram of Pit and McCloud River basins.

11363920 IRON CANYON RESERVOIR NEAR BIG BEND.--Lat 41°02'41", long 121°58'52", in SW¼SE¼ sec.21, T.37 N., R.1 W., Shasta County, Shasta National Forest, in control house on left bank 500 ft (150 m) upstream from Iron Canyon Dam on Iron Canyon Creek, 3.7 mi (6.0 km) northwest of Big Bend. Drainage area, 11.1 mi² (28.7 km²). Period of record, December 1965 to current year. Gage is a water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Extremes for current year: Maximum contents, 15,407 acre-ft (19.0 hm³) Aug. 26 (elevation, 2,644.80 ft or 806.135 m); minimum, 3,293 acre-ft (4.06 hm³) May 15 (elevation, 2,593.80 ft or 790.590 m). Extremes for period of record: Maximum contents, 22,800 acre-ft (28.1 hm³) July 24, 1968 (elevation, 2,662.07 ft or 811.399 m); normal minimum since initial operation of reservoir, 2,860 acre-ft (3.53 hm³) May 23, 24, 29, June 2, 7, 9, 14, 23, 24, 1966 (elevation, 2,590.00 ft or 789.432 m). Reservoir drained for inspection Feb. 10, 1971. Contents reduced to 195 acre-ft (240,000 m³), elevation, 2,540.00 ft or 774.192 m.

Reservoir is formed by a rockfill dam completed in 1965. Capacity is 24,200 acre-ft (29.8 hm³) between elevations 2,525.00 ft (769.620 m), invert of sluice pipe and 2,665.00 ft (812.292 m), crest of spillway. No dead storage. Water is diverted from Lake McCloud through a tunnel to Iron Canyon Reservoir and thence into the Pit River via a powerplant. Record of contents collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project. See schematic diagram of Pit and McCloud River basins.

11367740 LAKE McCLOUD NEAR McCLOUD.--Lat 41°08'06", long 122°04'26", in SE¼SW¼ sec.22, T.38 N., R.2 W., Shasta County, Shasta National Forest, on McCloud Dam near spillway on McCloud River, 200 ft (61 m) downstream from Panther Creek, and 8.8 mi (14.1 km) southeast of McCloud. Drainage area, 403 mi² (1,044 km²). Period of record, October 1965 to current year. Gage is a water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Extremes for current year: Maximum contents, 35,027 acre-ft (43.2 hm³) May 28-30 (elevation, 2,679.60 ft or 816.742 m); minimum, 18,571 acre-ft (22.9 hm³) Nov. 20 (elevation, 2,641.40 ft or 805.099 m). Extremes for period of record: Maximum contents, 35,967 acre-ft (44.3 hm³) Jan. 15, 1974 (elevation, 2,681.40 ft or 817.291 m); minimum since storage pool first filled, 15,700 acre-ft (19.4 hm³) Jan. 22, 1967 (elevation, 2,632.60 ft or 802.416 m).

Reservoir is formed by a rockfill dam completed in 1965. Capacity, 35,234 acre-ft (43.4 hm³) between elevations 2,471.30 ft (753.252 m), invert of sluice pipe and 2,680.00 ft (816.864 m), maximum operational water surface. No dead storage. Water is diverted from Lake McCloud through a diversion tunnel to Iron Canyon Reservoir and thence into the Pit River. Record of contents collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project. See schematic diagram of Pit and McCloud River basins.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
	Lake Britton			Iron Canyon Reservoir			Lake McCloud		
Sept. 30......	2,755.85	10,565	--	2,605.40	4,958	--	2,653.80	23,218	--
Oct. 31......	2,756.90	14,317	+3,752	2,604.90	4,874	-84	2,645.60	20,072	-3,146
Nov. 30......	2,750.20	6,365	-7,952	2,605.10	4,908	+34	2,641.70	18,675	-1,397
Dec. 31......	2,749.90	6,034	-331	2,604.60	4,825	-83	2,643.10	19,169	+494
CAL YR 1974	--	--	-4,770	--	--	+1,384	--	--	-12,547
Jan. 31......	2,746.40	2,344	-3,690	2,605.20	4,925	+100	2,643.50	19,312	+143
Feb. 28......	2,753.00	9,558	+7,214	2,594.70	3,404	-1,521	2,649.20	21,418	+2,106
Mar. 31......	2,754.25	11,044	+1,486	2,594.60	3,391	-13	2,677.50	33,950	+12,532
Apr. 30......	2,754.90	11,831	+787	2,594.80	3,416	+25	2,677.70	34,051	+101
May 31......	2,753.80	10,505	-1,326	2,595.00	3,441	+25	2,679.40	34,923	+872
June 30......	2,755.50	12,567	+2,062	2,623.90	8,923	+5,482	2,675.30	32,845	-2,078
July 31......	2,752.60	9,091	-3,476	2,636.00	12,397	+3,474	2,677.20	33,798	+953
Aug. 31......	2,755.35	12,382	+3,291	2,643.80	15,041	+2,644	2,675.70	33,044	-754
Sept. 30......	2,755.40	12,443	+61	2,641.40	14,188	-853	2,666.50	28,662	-4,382
WTR YR 1975	--	--	+1,878	--	--	+9,230	--	--	+5,444

11362500 PIT RIVER BELOW PIT NO. 4 DAM, CALIF.

LOCATION.--Lat 40°58'25", long 121°46'42" (unsurveyed), T.36 N., R.2 E., Shasta County, Shasta National Forest, on right bank 0.6 mi (1.0 km) downstream from Ruling Creek, 1.3 mi (2.1 km) downstream from Pit No. 4 dam, and 2.7 mi (4.3 km) downstream from Pit No. 3 powerhouse.

DRAINAGE AREA.--4,648 mi^2 (12,038 km^2), revised, excluding Goose Lake basin.

PERIOD OF RECORD.--May 1922 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "near Pecks Bridge" April to October 1922, and as "at Lindsay Flat" November 1922 to June 1927.

GAGE.--Water-stage recorder. Altitude of gage is 2,358 ft (718.7 m), from river-profile map. Prior to November 1922, water-stage recorder at site at Pecks Bridge 7.4 mi (11.9 km) upstream at different datum. November 1922 to June 20, 1927, at site at Lindsay Flat 1.8 mi (2.9 km) upstream at different datum.

AVERAGE DISCHARGE.--65 years (1910-75), 2,797 ft^3/s (79.21 m^3/s), 2,026,000 acre-ft/yr (2,498 hm^3/yr), including diversion to Pit No. 4 powerplant. Period 1910-22 extrapolated on basis of records for Pit River at Big Bend.

EXTREMES.--Current year: Maximum discharge, 11,900 ft^3/s (337 m^3/s) Feb. 14 (gage height, 12.58 ft or 3.834 m); minimum daily, 53 ft^3/s (1.50 m^3/s) Dec. 28.

Period of record: Maximum discharge, 31,000 ft^3/s (878 m^3/s) Jan. 25, 1970 (gage height, 18.04 ft or 5.499 m), from rating curve extended above 17,000 ft^3/s (481 m^3/s); minimum daily, 234 ft^3/s (6.63 m^3/s) Sept. 13, 1953. Minimum daily discharge since diversion to Pit No. 4 powerplant in 1955, 22 ft^3/s (0.62 m^3/s) Dec. 2-4, 1969.

REMARKS.--Flow regulated by many small reservoirs and powerplants, total usable reservoir capacity, 253,000 acre-ft (312 hm^3). Many diversions above station; diversion to Pit No. 4 powerplant began June 9, 1955. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 843: 1935(M). WSP 1315-A: 1928(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131	83	64	57	56	61	465	1450	162	163	159	155
2	101	77	61	57	57	468	427	1260	156	159	160	154
3	102	79	60	57	56	1290	427	1230	152	156	162	156
4	112	78	59	56	57	1510	502	1420	152	156	157	157
5	106	77	58	57	57	1580	519	1600	154	156	159	155
6	102	77	59	57	55	1520	531	1590	146	163	156	156
7	104	118	59	58	55	1450	641	1400	146	154	156	153
8	108	81	60	55	57	1600	643	1130	148	163	156	153
9	101	82	58	56	61	1920	589	1140	156	148	159	152
10	97	83	61	55	62	2020	521	1090	159	165	155	151
11	97	83	60	57	61	1840	635	1090	159	160	156	158
12	99	81	60	57	66	1310	870	1170	161	163	164	157
13	101	82	60	56	2460	795	976	1200	156	162	160	153
14	106	80	59	57	3780	454	903	1210	150	164	157	160
15	110	80	59	56	3340	127	1120	1400	156	165	155	156
16	110	80	58	56	3010	60	1590	1470	156	161	153	159
17	114	81	57	56	1840	95	1610	1460	152	159	156	164
18	114	79	58	57	720	67	1420	1330	167	158	155	163
19	117	79	57	56	184	316	1100	1130	161	162	156	158
20	112	80	58	58	84	1370	914	1080	161	156	155	159
21	99	83	57	57	62	1780	986	889	163	153	151	154
22	99	85	56	58	60	1560	1050	730	163	154	154	153
23	99	83	56	57	58	1230	1170	661	165	159	153	158
24	106	82	55	58	59	915	1200	588	159	154	150	160
25	101	82	56	59	56	1460	1640	438	159	158	160	156
26	101	78	57	58	57	2330	2400	317	161	162	161	158
27	101	79	56	58	59	2090	2470	188	159	161	143	159
28	101	79	53	58	56	1910	2300	177	159	159	155	158
29	104	81	55	57	---	1410	1990	154	163	158	165	162
30	104	85	56	55	---	885	1710	148	165	157	158	149
31	108	---	56	54	---	609	---	153	---	154	154	---
TOTAL	3267	2457	1798	1760	16585	36032	33319	30293	4726	4922	4850	4696
MEAN	105	81.9	58.0	56.8	592	1162	1111	977	158	159	156	157
MAX	131	118	64	59	3780	2330	2470	1600	167	165	165	164
MIN	97	77	53	54	55	60	427	148	146	148	143	149
AC-FT	6480	4870	3570	3490	32900	71470	66090	60090	9370	9760	9620	9310
MEAN a	2,614	2,936	2,794	2,838	3,864	4,886	4,848	4,689	3,222	2,483	2,288	2,501
AC-FT a	160,700	174,700	171,800	174,500	214,600	300,400	288,500	288,300	191,700	152,700	140,700	148,800

CAL YR 1974 TOTAL 331135 MEAN 907 MAX 15700 MIN 53 AC-FT 656800 MEAN a 3,597 AC-FT a 2,604,000
WTR YR 1975 TOTAL 144705 MEAN 396 MAX 3780 MIN 53 AC-FT 287000 MEAN a 3,325 AC-FT a 2,407,000

a Adjusted for diversion to Pit No. 4 powerplant.

11363000 PIT RIVER AT BIG BEND, CALIF.

LOCATION.--Lat 41°01'10", long 121°54'36", in NW¼SW¼ sec.31, T.37 N., R.1 E., Shasta County, on left bank at Big Bend, 0.4 mi (0.6 km) downstream from Nelson Creek, and 1.5 mi (2.4 km) upstream from Kosk Creek.

DRAINAGE AREA.--4,711 mi² (12,201 km²), revised, excluding Goose Lake basin.

PERIOD OF RECORD.--October 1910 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "at Henderson" 1910-23.

GAGE.--Water-stage recorder. Datum of gage is 1,674.47 ft (510.378 m) above mean sea level. Prior to Dec. 28, 1912, nonrecording gage and Dec. 28, 1912, to June 21, 1924, water-stage recorder at same site at datum 7.69 ft (2.344 m) higher.

AVERAGE DISCHARGE (prior to diversion to Pit No. 5 powerplant).--33 years (1910-43), 2,931 ft³/s (83.0 m³/s), 2,122,000 acre-ft/yr (2,616 hm³); 32 years (1943-75), 602 ft³/s (17.05 m³/s), 436,100 acre-ft/yr (538 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 6,110 ft³/s (173 m³/s) Mar. 26 (gage height, 10.66 ft or 3.249 m); minimum daily, 54 ft³/s (1.53 m³/s) Dec. 29.
Period of record: Maximum discharge, 49,000 ft³/s (1,390 m³/s) Jan. 25, 1970 (gage height, 18.17 ft or 5.538 m in gage well, 19.0 ft or 5.79 m, from floodmarks), from rating curve extended above 17,000 ft³/s (481 m³/s), partly affected by gate operation at Pit No. 4 dam; minimum daily, 34 ft³/s (0.96 m³/s) Mar. 29, 1955.

REMARKS.--Flow regulated by many reservoirs and powerplants, total usable reservoir capacity, about 253,000 acre-ft (312 hm³). Many diversions above station; diversion to Pit No. 5 powerhouse began May 1, 1944. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1345: 1911, 1914(M), 1916(M), 1917, 1928, 1935-36(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	621	78	55	71	133	1110	2070	285	151	120	117
2	131	261	68	56	61	685	1040	1870	386	150	119	121
3	132	251	88	56	85	1700	1040	1860	325	150	119	121
4	134	281	140	61	85	1960	1110	2020	271	146	122	119
5	134	106	78	62	76	2030	1150	2170	222	143	123	123
6	131	115	60	65	86	1990	1110	2150	212	143	125	122
7	129	861	63	81	118	1960	1230	1990	205	143	125	121
8	126	798	62	101	152	2150	1230	1730	198	141	126	111
9	121	785	59	73	245	2500	1160	1760	189	141	116	121
10	128	881	58	68	197	2560	1100	1700	189	130	123	121
11	128	848	58	62	179	2360	1170	1700	187	129	122	121
12	128	653	62	60	567	1900	1440	1700	181	135	121	121
13	133	829	62	60	2910	1340	1550	1820	179	149	121	123
14	127	413	63	61	4490	982	1520	1840	175	135	123	118
15	131	107	62	62	3860	648	1630	2000	173	146	125	112
16	131	103	62	63	3570	509	2080	2030	169	139	119	113
17	130	99	62	65	2420	375	2130	2060	167	138	116	116
18	131	106	60	66	1330	924	1930	1910	171	138	126	118
19	133	102	58	65	729	1720	1740	1740	169	133	127	117
20	296	101	58	66	475	2290	1460	1660	165	135	125	119
21	749	103	57	65	229	2620	1540	1490	157	133	127	119
22	948	103	56	63	122	2360	1610	1300	151	133	122	113
23	928	99	57	63	117	1930	1730	1210	159	137	118	115
24	835	96	57	63	116	1710	2020	1250	181	132	119	112
25	792	107	58	62	118	2430	2310	966	167	133	120	114
26	901	102	57	67	116	2950	2980	840	163	129	121	113
27	928	98	66	63	115	2810	3030	707	161	123	122	109
28	1010	100	58	62	122	2630	2910	677	155	129	128	113
29	342	97	54	60	---	2100	2580	645	150	129	122	119
30	607	92	55	61	---	1610	2300	653	150	127	117	114
31	551	---	57	66	---	1310	---	503	---	130	116	---
TOTAL	11357	9238	1993	2003	22761	55156	50960	48101	5812	4258	3783	3514
MEAN	366	308	64.3	64.6	813	1779	1698	1552	194	137	122	117
MAX	1010	881	140	101	4490	2950	3030	2170	386	151	128	123
MIN	121	92	54	55	71	133	1040	503	150	123	116	109
AC-FT	22530	18320	3950	3970	45150	109400	101000	95410	11530	8450	7500	6970

CAL YR 1974 TOTAL 454283 MEAN 1245 MAX 21500 MIN 54 AC-FT 901100
WTR YR 1975 TOTAL 218916 MEAN 600 MAX 4490 MIN 54 AC-FT 434200

11363910 JAMES B. BLACK POWERPLANT NEAR BIG BEND, CALIF.

LOCATION.--Lat 40°59'12", long 121°58'35", in SW¼SE¼ sec.9, T.36 N., R.1 W., Shasta County, at powerplant on right bank of Pit River, 5.8 mi (9.3 km) downstream from Big Bend.

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Recorded output from powerplant turbines.

AVERAGE DISCHARGE.--9 years, 1,069 ft³/s (30.27 m³/s), 774,500 acre-ft/yr (955 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 2,420 ft³/s (68.5 m³/s) July 15, 1966; no flow for several days in each year.

REMARKS.--Water is diverted from Lake McCloud (see sta 11367740) at SE¼SW¼ sec.22, T.38 N., R.2 W., to Iron Canyon Reservoir (see sta 11363920), and then into the penstock for James B. Black powerplant. Records are combined flow of diversion from McCloud River at McCloud Dam plus Iron Canyon Creek.

COOPERATION.--Records furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1050	938	924	706	637	1320	1310	1290	1610	792	988	725
2	1080	994	928	1050	1050	1140	1330	1240	1550	1190	972	1150
3	1020	792	1040	903	784	1350	1530	1330	1550	1030	608	1610
4	919	1180	980	678	1030	1270	1380	1350	1450	625	1540	1770
5	1180	945	796	1100	1110	1230	1840	1260	1460	897	759	1390
6	907	875	1110	901	1030	1220	1880	1280	1390	758	761	1060
7	1170	996	898	1040	1040	874	1370	1290	1480	1040	1370	835
8	1030	952	1020	874	1010	1200	1320	1260	1420	1140	1240	1170
9	845	881	942	1010	1060	1420	1370	1310	1460	1040	743	925
10	935	895	956	750	1150	1900	1370	1430	1300	1060	613	775
11	993	840	1070	931	1400	1360	1360	1300	1470	950	1530	778
12	1080	975	698	837	1540	1320	391	1320	1450	219	743	753
13	1060	930	1220	949	1510	1200	855	1480	1430	705	909	1560
14	999	814	906	1110	1320	1120	1100	1300	1400	1520	1050	1020
15	896	964	853	944	1230	1110	1350	1440	1470	1020	1190	1230
16	954	912	1010	926	1240	1170	1500	1180	1130	1110	682	1030
17	1060	912	999	815	1200	1160	1370	1500	1640	864	862	746
18	705	838	880	893	1130	1130	1420	1290	1450	993	399	966
19	1230	1010	963	921	1310	1640	1390	820	1460	824	1030	978
20	941	789	947	973	1220	1640	1300	1350	1370	863	872	1010
21	853	1000	820	904	1060	1320	1320	2010	776	1010	556	1050
22	1220	887	998	843	1330	1310	1270	1540	963	1240	1180	954
23	675	878	1000	955	1090	1300	1230	1550	756	1160	644	1110
24	362	948	897	953	1180	1300	1390	1580	996	855	1040	1290
25	629	855	990	904	1190	1490	1260	1590	869	1230	1010	1070
26	445	876	994	897	1070	1390	1350	1570	1040	872	634	886
27	551	807	1010	982	1200	1430	1310	1600	1040	351	1210	718
28	868	1130	678	887	1180	1390	1460	1540	1220	1370	1190	1130
29	2000	835	954	926	---	1440	1430	1620	1160	859	852	491
30	520	983	1000	1100	---	1360	1220	1590	830	1230	830	1010
31	1630	---	1010	997	---	1360	---	1560	---	1290	722	---
TOTAL	29807	27631	29491	28659	32301	40864	39976	43770	38590	30107	28729	31190
MEAN	962	921	951	924	1154	1318	1333	1412	1286	971	927	1040
MAX	2000	1180	1220	1110	1540	1900	1880	2010	1640	1520	1540	1770
MIN	362	789	678	678	637	874	391	820	756	219	399	491
AC-FT	59120	54810	58500	56850	64070	81050	79290	86820	76540	59720	56980	61870

CAL YR 1974 TOTAL 453834.00 MEAN 1243 MAX 2000 MIN .00 AC-FT 900200
WTR YR 1975 TOTAL 401115.00 MEAN 1099 MAX 2010 MIN 219 AC-FT 795600

11363930 IRON CANYON CREEK BELOW IRON CANYON DAM, NEAR BIG BEND, CALIF.

LOCATION.--Lat 41°02'27", long 121°59'02", in NW¼NW¼ sec.28, T.37 N., R.1 W., Shasta County, on left bank 0.2 mi (0.3 km) downstream from Iron Canyon Dam, and 4.2 mi (6.8 km) west of Big Bend.

DRAINAGE AREA.--11.6 mi^2 (30.0 km^2).

PERIOD OF RECORD.--August 1966 to current year.

GAGE.--Water-stage recorder, 60° sharp-crested V-notch weir, and concrete control. Datum of gage is 2,461.52 ft (750.271 m) above mean sea level (levels by Pacific Gas and Electric Co.).

AVERAGE DISCHARGE.--9 years, 4.55 ft^3/s (0.129 m^3/s), 3,300 acre-ft/yr (4.07 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5.9 ft^3/s (0.17 m^3/s) Mar. 18, Apr. 24 (gage height, 1.54 ft or 0.469 m); minimum daily, 2.8 ft^3/s (0.079 m^3/s) Dec. 19, Feb. 27, June 25, Aug. 27.

Period of record: Maximum discharge recorded, 391 ft^3/s (11.1 m^3/s) Feb. 1, 1971 (gage height, 3.10 ft or 0.945 m), from rating curve extended above 65 ft^3/s (1.84 m^3/s) on basis of computation of flow over weir (flow was a result of sluicing at dam); no flow July 15-18, 1967.

REMARKS.--Flow is regulated by Iron Canyon Dam (see sta 11363920). There is inter-basin diversion from Lake McCloud (see sta 11367790) to Iron Canyon Reservoir (see sta 11363920) and then into a tunnel to James B. Black powerplant on the Pit River (see sta 11363910). See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
3	3.1	3.1	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
4	3.1	3.1	3.0	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
5	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
6	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
7	3.1	3.1	3.1	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
8	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
9	3.1	3.1	3.1	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
10	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
11	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
12	3.1	3.1	3.1	3.1	3.7	3.1	3.1	3.1	3.1	3.1	3.1	3.1
13	3.1	3.1	3.2	3.1	3.5	3.1	3.1	3.1	3.1	3.1	3.1	3.1
14	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
15	3.1	3.1	3.1	3.1	3.1	3.1	3.2	3.1	3.1	3.1	3.1	3.1
16	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
17	3.2	3.1	3.1	3.1	3.1	3.1	2.9	3.1	3.1	3.1	3.1	3.1
18	3.1	3.1	3.1	3.1	3.1	4.2	3.1	3.1	3.1	3.1	3.1	3.1
19	3.1	3.1	2.8	3.1	3.1	3.7	3.1	3.1	3.1	3.1	3.1	3.1
20	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
21	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
22	2.9	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
23	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
24	3.1	3.1	3.1	3.1	3.1	3.2	3.3	3.1	3.1	3.1	3.1	3.1
25	3.2	3.1	3.1	3.1	3.1	3.6	3.1	3.1	2.8	3.1	3.1	3.1
26	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
27	3.1	3.1	3.1	3.1	2.8	3.1	3.1	3.1	3.1	3.1	2.8	3.1
28	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
29	3.1	3.1	3.1	3.1	---	3.1	3.1	3.1	3.1	3.1	3.2	3.1
30	3.1	3.1	3.1	3.1	---	3.1	3.1	3.1	3.1	3.1	3.1	3.1
31	3.1	---	3.1	3.1	---	3.1	---	3.1	---	3.1	3.1	---
TOTAL	96.2	93.0	95.9	96.4	87.5	98.4	93.1	96.1	92.7	96.1	95.9	93.0
MEAN	3.10	3.10	3.09	3.11	3.13	3.17	3.10	3.10	3.09	3.10	3.09	3.10
MAX	3.2	3.1	3.2	3.2	3.7	4.2	3.3	3.1	3.1	3.1	3.2	3.1
MIN	2.9	3.1	2.8	3.1	2.8	3.1	2.9	3.1	2.8	3.1	2.8	3.1
AC-FT	191	184	190	191	174	195	185	191	184	191	190	184

CAL YR 1974 TOTAL 1164.9 MEAN 3.19 MAX 11 MIN 2.5 AC-FT 2310
WTR YR 1975 TOTAL 1134.3 MEAN 3.11 MAX 4.2 MIN 2.8 AC-FT 2250

11365000 PIT RIVER NEAR MONTGOMERY CREEK, CALIF.

LOCATION.--Lat 40°50'36", long 122°00'58", in NW¼SE¼ sec.31, T.35 N., R.1 W., Shasta County, Shasta National Forest, on right bank 0.5 mi (0.8 km) upstream from Potem Creek, 1.9 mi (3.1 km) downstream from Pit No. 7 dam and powerhouse, and 5.0 mi (8.0 km) west of town of Montgomery Creek.

DRAINAGE AREA.--4,952 mi^2 (12,823 km^2), revised, excluding Goose Lake basin.

PERIOD OF RECORD.--October 1944 to current year (monthly discharge only December 1964 to May 1965). Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 1,036 ft (315.773 m) above mean sea level (levels by Pacific Gas and Electric Co.). October 1944 to Feb. 17, 1963, at site 1.9 mi (3.1 km) upstream at different datum. Feb. 17, 1963, to May 21, 1965, at site 2.7 mi (4.3 km) upstream at different datum.

AVERAGE DISCHARGE (prior to diversion from McCloud River).--21 years (1944-65), 3,759 ft^3/s (106.5 m^3/s), 2,721,000 acre-ft/yr (3.35 km^3/yr); 10 years (1965-75), 5,590 ft^3/s (158.3 m^3/s), 4,050,000 acre-ft/yr (4.99 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 24,600 ft^3/s (697 m^3/s) Feb. 14 (gage height, 28.15 ft or 8.580 m); maximum gage height, 31.65 ft or 9.647 m June 5 (backwater from Shasta Lake); minimum daily discharge, 30 ft^3/s (0.85 m^3/s) July 12, 27, result of construction work below Pit No. 7 powerplant.

Period of record: Maximum discharge, 73,000 ft^3/s (2,070 m^3/s) Jan. 24, 1970 (gage height, 32.36 ft or 9.863 m); minimum daily, 30 ft^3/s (0.85 m^3/s) July 12, 27, 1975, result of construction work below Pit No. 7 powerplant.

REMARKS.--Flow regulated by many reservoirs and powerplants, total usable reservoir capacity, 337,000 acre-ft (416 hm^3). Many diversions above station for irrigation. Diversion from McCloud River to Pit River began December 1965 (see sta 11367720). See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1967: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4030	4180	3280	4700	3190	5500	8400	8440	6040	3140	4330	4320
2	4320	3780	4470	4750	3290	6100	8380	8440	6000	3450	1670	5490
3	4130	3870	6040	4740	4330	8030	8250	8450	6220	4480	2370	5030
4	4450	4590	6570	2550	5070	8030	8370	8450	6330	3080	3950	5550
5	3930	4010	7050	2680	4790	7640	7760	8440	5600	2720	3760	5390
6	3320	3720	6450	3460	6440	7190	8150	8440	5970	3650	3950	5020
7	4580	5380	7220	5620	5880	8060	8130	8440	6250	4640	4310	5540
8	4490	4510	3600	5930	6270	8060	8110	8450	5370	4900	4380	2940
9	3610	4610	3710	5120	6870	8760	7990	8460	6000	4800	2890	2930
10	3550	4320	5060	3880	7900	10100	7940	8450	6130	4720	1690	1830
11	3250	5120	257	2750	7110	9190	8010	8450	6050	2760	2450	2960
12	3940	4110	1150	3050	8060	8580	8070	8450	8210	30	3110	3810
13	4530	4950	2850	4140	13500	8250	8410	8450	7900	110	4710	5620
14	3280	4640	2800	5110	13400	8230	8430	8450	7600	4150	4130	3040
15	4080	3680	2680	5100	10600	8190	8420	8460	7550	4340	4640	2960
16	3380	3830	4100	4430	10300	7490	8410	8460	4640	4390	1290	3560
17	3450	4090	4720	4450	8960	6370	8450	8460	4210	3960	1310	3600
18	5250	3930	4370	2720	7860	8230	8470	8460	4210	4620	4230	3460
19	4430	4820	4670	3370	7820	17200	8480	8460	4280	1570	4970	5030
20	1080	3530	5050	3640	6330	13000	8480	8450	4290	2460	4120	5280
21	3000	3610	2390	4670	5990	10900	8460	8430	4360	4070	3870	4900
22	4640	4460	2750	3820	5990	10200	8460	8400	4230	4380	5780	2970
23	4070	3930	4380	4610	5520	9490	8460	8370	4120	5050	2050	3030
24	3020	4530	4190	4890	5490	10100	8450	7880	4360	3780	1550	3160
25	3340	3570	4790	2980	5040	13200	8450	7270	4330	4160	4070	3210
26	3170	3990	5110	3490	5400	11100	8430	7020	4360	2630	3640	3120
27	3870	4270	4830	4170	5730	10500	8430	7390	4420	30	4510	75
28	3200	4870	2650	5000	8120	10000	8430	5440	5990	4280	4360	2800
29	3070	4250	3160	5000	---	9450	8430	6790	6820	3820	3100	3560
30	2950	3180	3700	4450	---	9080	8440	7080	3930	4150	1660	2930
31	4640	---	4250	5100	---	8400	---	6840	---	5060	3240	---
TOTAL	116050	126330	128377	130370	195250	284620	249550	249920	165770	109380	106090	113115
MEAN	3744	4211	4141	4205	6973	9181	8318	8062	5526	3528	3422	3771
MAX	5250	5380	7220	5930	13500	17200	8480	8460	8210	5060	5780	5620
MIN	1080	3180	257	2550	3190	5500	7760	5440	3930	30	1290	75
AC-FT	230200	250600	254600	258600	387300	564500	495000	495700	328800	217000	210400	224400

CAL YR 1974 TOTAL 2563614 MEAN 7024 MAX 43500 MIN 62 AC-FT 5085000
WTR YR 1975 TOTAL 1974822 MEAN 5410 MAX 17200 MIN 30 AC-FT 3917000

11365000 PIT RIVER NEAR MONTGOMERY CREEK, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water years 1951, 1953, 1955-58 (partial-record station), October 1958 to September 1968, water years 1969 to current year (partial-record station).
Water temperatures: June to September 1951, October 1953 to September 1957, October 1958 to August 1959.

REMARKS.--Records furnished by California Department of Water Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
MAR. 19...	1000	18700	2000	30	6.4	61	0	50	2.6	.07

DATE	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAR. 19...	.20	.08	43	0	.4	0	0	0	0	10

DATE	TIME	DISCHARGE (CFS)	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
NOV. 07...	1100	--	6800	132	7.3	9.5	132	12.3
JAN. 14...	1115	--	4560	138	7.2	5.5	138	12.3
MAR. 19...	1000	--	18700	105	7.3	7.5	17	11.2
JULY 16...	1630	4390	--	135	8.0	19.0	135	7.9
SEP. 17...	1015	--	7720	139	7.8	16.0	139	9.3

11367500 McCLOUD RIVER NEAR McCLOUD, CALIF.

LOCATION.--Lat 41°11'18", long 122°03'52", in NW¼NE¼ sec.34, T.39 N., R.2 W., Siskiyou County, on right bank 0.4 mi (0.6 km) downstream from Angel Creek, and 6 mi (10 km) southeast of McCloud.

DRAINAGE AREA.--358 mi² (927 km²).

PERIOD OF RECORD.--April 1931 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,711.2 ft (826.37 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--44 years, 936 ft³/s (26.51 m³/s), 678,100 acre-ft/yr (836 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,890 ft³/s (53.5 m³/s) May 15 (gage height, 2.84 ft or 0.866 m); minimum daily, 908 ft³/s (25.7 m³/s) Jan. 29.

Period of record: Maximum discharge, 11,800 ft³/s (334 m³/s) Dec. 21, 1955 (gage heights, 9.42 ft or 2.871 m in gage well, 10.7 ft or 3.26 m, from floodmarks), from rating curve extended above 8,800 ft³/s (249 m³/s) on basis of slope-area measurement of maximum flow; minimum, 524 ft³/s (14.8 m³/s) Nov. 23, 24, 1932.

REMARKS.--Two small diversions above station for irrigation, and one 22-in (0.56-m) pipeline for town of McCloud and millpond. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 843: 1936(M). WSP 1445: 1940(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	979	957	932	927	918	991	1110	1430	1680	1100	994	950
2	981	955	942	923	921	1160	1110	1470	1640	1090	991	947
3	981	955	997	923	926	1100	1100	1600	1620	1080	987	947
4	982	955	1050	929	918	1120	1100	1650	1560	1070	986	942
5	981	955	999	929	917	1080	1090	1530	1560	1080	984	940
6	976	954	980	932	922	1070	1070	1480	1560	1070	982	939
7	971	960	967	935	931	1150	1060	1480	1530	1060	979	939
8	970	955	962	947	944	1430	1060	1520	1450	1060	978	937
9	970	947	956	934	1040	1380	1060	1570	1400	1050	978	936
10	970	947	954	932	1040	1290	1060	1610	1370	1050	978	934
11	971	947	953	928	1030	1220	1070	1660	1350	1050	975	933
12	969	944	952	924	1070	1160	1080	1670	1330	1040	972	932
13	970	939	948	923	1090	1140	1090	1710	1320	1040	971	933
14	970	939	953	923	1080	1100	1100	1700	1300	1040	971	932
15	969	939	951	922	1040	1090	1080	1850	1290	1050	970	932
16	969	939	947	922	1010	1070	1070	1820	1280	1050	970	930
17	968	940	946	920	984	1060	1060	1790	1250	1040	972	925
18	965	940	943	922	971	1130	1060	1790	1220	1040	972	924
19	964	939	942	923	970	1570	1090	1800	1200	1030	970	924
20	962	939	939	923	955	1570	1100	1710	1190	1030	969	924
21	955	962	944	922	942	1400	1080	1600	1170	1020	964	920
22	957	956	948	920	936	1270	1230	1580	1160	1020	964	917
23	959	941	933	919	936	1150	1250	1580	1160	1010	963	916
24	956	940	930	920	936	1180	1440	1590	1200	1010	961	916
25	955	941	934	924	941	1300	1680	1560	1170	1010	958	915
26	955	939	927	931	945	1430	1490	1520	1150	1000	955	913
27	962	934	947	924	947	1140	1420	1530	1140	1000	955	913
28	981	933	936	914	958	1130	1400	1550	1120	1000	955	912
29	962	932	924	908	---	1120	1390	1570	1110	999	953	910
30	956	932	932	909	---	1120	1410	1600	1100	998	950	909
31	962	---	921	922	---	1120	---	1640	---	995	949	---
TOTAL	29998	28355	29489	28654	27218	37321	35410	50240	39580	32182	30076	27841
MEAN	968	945	951	924	972	1204	1180	1621	1319	1038	970	928
MAX	982	962	1050	947	1090	1570	1680	1850	1680	1100	994	950
MIN	955	932	921	908	917	991	1060	1430	1100	995	949	909
AC-FT	59500	56240	58490	56840	53990	74030	70240	99650	78510	63830	59660	55220

CAL YR 1974 TOTAL 493163 MEAN 1351 MAX 10100 MIN 921 AC-FT 978200
WTR YR 1975 TOTAL 396364 MEAN 1086 MAX 1850 MIN 908 AC-FT 786200

Peak discharge (base, 1,500 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
3-8	1730	2.42	1,500	4-25	0215	2.72	1,770
3-19	1345	2.59	1,650	5-15	0600	2.84	1,890
3-26	unknown	--	unknown				

11367720 McCLOUD-IRON CANYON DIVERSION TUNNEL NEAR McCLOUD, CALIF.

LOCATION.--Lat 41°08'06", long 122°04'26", in SE¼SW¼ sec.22, T.38 N., R.2 W., Shasta County, Shasta National Forest, on left bank of Lake McCloud, 8.8 mi (14.2 km) southeast of McCloud.

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--None. Water-stage recorders on Lake McCloud and Iron Canyon Reservoir used to compute record.

AVERAGE DISCHARGE.--9 years, 1,084 ft^3/s (30.70 m^3/s), 785,400 acre-ft/yr (968 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,890 ft^3/s (53.5 m^3/s) May 20-22, June 1-3, 10, 1967; no flow for several days in 1965-68, 1971.

REMARKS.--Water is diverted from Lake McCloud (see sta 11367740) to Iron Canyon Reservoir (see sta 11363920) and thence into James B. Black powerplant (see sta 11363910) on the Pit River. Diversion began Dec. 1, 1965. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISION.--Revised figures of discharge for the water year 1973, superseding those published in WRD Calif. 1973, are given herein.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	574	631	726	836	1210	1400	1090	1310	1050	770	860	697
2	618	655	690	818	1190	1400	1080	1310	956	788	848	711
3	633	687	711	839	1110	1400	1090	1310	877	782	843	661
4	646	671	694	859	1010	1400	1080	1310	889	781	782	689
5	652	666	701	903	912	1400	1090	1310	902	781	770	692
6	671	689	699	829	848	1400	1130	1300	879	812	787	701
7	574	641	690	825	836	1400	1190	1300	867	781	821	692
8	489	614	714	815	867	1390	1210	1300	850	761	813	702
9	582	648	687	853	836	1390	1200	1300	819	788	793	696
10	598	626	650	838	893	1390	1210	1280	754	850	805	732
11	646	662	655	812	956	1380	1270	1300	743	859	761	776
12	673	637	648	791	897	1390	1270	1260	761	864	743	767
13	666	662	642	843	901	1370	1270	1220	782	852	770	735
14	655	729	574	857	918	1370	1280	1210	793	808	762	689
15	644	742	582	846	965	1360	1280	1230	819	811	761	677
16	657	758	598	881	985	1350	1280	1250	779	811	764	707
17	673	803	604	943	1010	1350	1290	1280	753	845	761	722
18	666	714	586	1050	997	1340	1290	1260	803	895	756	759
19	666	747	685	1130	996	1330	1290	1230	818	885	714	709
20	697	764	684	1210	1000	1320	1290	1240	803	889	685	721
21	627	702	750	1290	1010	1320	1290	1240	828	863	689	712
22	590	719	767	1320	1010	1310	1280	1220	781	835	699	702
23	582	648	824	1310	1050	1300	1280	1210	781	838	717	675
24	584	742	834	1290	1060	1290	1280	1180	779	864	734	690
25	598	666	860	1300	1160	1280	1280	1180	793	921	704	722
26	648	675	846	1250	1260	1230	1290	1170	802	907	684	758
27	644	701	894	1250	1340	1170	1290	1140	828	894	721	750
28	629	711	895	1150	1390	1130	1300	1130	821	868	694	759
29	596	706	920	1210	---	1100	1320	1090	829	856	717	717
30	648	772	881	1230	---	1100	1330	1040	785	855	707	689
31	629	---	898	1230	---	1060	---	1030	---	852	734	---
TOTAL	19455	20788	22589	31608	28617	40820	37120	38140	24724	25966	23399	21409
MEAN	628	693	729	1020	1022	1317	1237	1230	824	838	755	714
MAX	697	803	920	1320	1390	1400	1330	1310	1050	921	860	776
MIN	489	614	574	791	836	1060	1080	1030	743	761	684	661
AC-FT	38590	41230	44810	62690	56760	80970	73630	75650	49040	51500	46410	42460

CAL YR 1972 TOTAL 347433 MEAN 949 MAX 1490 MIN 466 AC-FT 689100
WTR YR 1973 TOTAL 334635 MEAN 917 MAX 1400 MIN 489 AC-FT 663700

11367720 McCLOUD-IRON CANYON DIVERSION TUNNEL NEAR McCLOUD, CALIF.--*Continued*

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1060	972	921	923	915	1130	1400	1410	1420	1090	981	859
2	1050	975	921	941	938	1140	1400	1400	1420	1100	975	877
3	1040	942	953	933	919	1180	1400	1400	1420	1080	944	924
4	1010	978	979	894	934	1190	1390	1400	1420	1040	982	976
5	1030	963	954	933	963	1190	1390	1410	1420	1030	962	1000
6	1010	949	980	932	970	1190	1390	1410	1420	1010	942	996
7	1030	954	974	951	978	1140	1380	1410	1420	1010	969	976
8	1020	953	967	942	986	1170	1360	1410	1420	1020	985	982
9	986	948	961	954	1010	1210	1340	1400	1410	1020	962	965
10	972	937	952	920	1030	1300	1360	1400	1400	1020	932	941
11	972	924	973	927	1100	1220	1350	1390	1410	1010	973	918
12	984	937	930	914	1150	1230	1350	1410	1420	947	949	903
13	986	942	965	918	1180	1330	1350	1410	1420	932	941	953
14	979	921	947	947	1200	1320	1350	1410	1410	976	944	941
15	959	928	928	953	1200	1320	1350	1410	1420	980	959	948
16	952	924	939	951	1200	1320	1310	1410	1370	988	933	958
17	961	924	959	929	1190	1320	1320	1410	1400	976	925	925
18	912	912	951	918	1170	1290	1350	1390	1400	975	881	921
19	964	930	956	929	1180	1360	1340	1410	1400	963	891	927
20	956	914	954	934	1180	1390	1350	1410	1390	957	882	918
21	937	933	938	935	1150	1400	1350	1410	1300	963	856	924
22	975	935	953	916	1170	1400	1340	1410	1260	992	874	916
23	924	932	962	935	1160	1400	1330	1410	1200	994	857	934
24	838	935	952	934	1150	1400	1370	1420	1180	976	871	952
25	812	924	958	928	1150	1410	1380	1420	1150	994	878	943
26	767	912	965	937	1130	1410	1400	1420	1150	984	855	925
27	748	899	973	943	1140	1410	1400	1420	1130	933	878	838
28	784	941	927	942	1140	1410	1400	1410	1130	964	879	761
29	956	918	938	938	---	1410	1400	1420	1130	954	894	726
30	883	932	951	942	---	1400	1400	1420	1100	973	887	772
31	982	---	956	953	---	1400	---	1420	---	988	870	---
TOTAL	29439	28088	29537	28946	30583	40390	41000	43680	39940	30839	28511	27499
MEAN	950	936	953	934	1092	1303	1367	1409	1331	995	920	917
MAX	1060	978	980	954	1200	1410	1400	1420	1420	1100	985	1000
MIN	748	899	921	894	915	1130	1310	1390	1100	932	855	726
AC-FT	58390	55710	58590	57410	60660	80110	81320	86640	79220	61170	56550	54540

CAL YR 1974 TOTAL 436608 MEAN 1196 MAX 1420 MIN 748 AC-FT 866000
WTR YR 1975 TOTAL 398452 MEAN 1092 MAX 1420 MIN 726 AC-FT 790300

11367760 McCLOUD RIVER BELOW McCLOUD DAM, NEAR McCLOUD, CALIF.

LOCATION.--Lat 41°07'44", long 122°04'08", in SW¼NE¼ sec.27, T.38 N., R.2 W., Shasta County, Shasta National Forest, on left bank 0.1 mi (0.2 km) downstream from Lizard Creek, 0.6 mi (1.0 km) downstream from McCloud Dam, and 9 mi (14.5 km) southeast of McCloud.

DRAINAGE AREA.--404 mi^2 (1,046 km^2).

PERIOD OF RECORD.--April 1966 to current year (low flow only).

GAGE.--Water-stage recorder. Datum of gage is 2,401.76 ft (732.056 m) above mean sea level (levels by Pacific Gas and Electric Co.).

REMARKS.--Flow regulated by Lake McCloud (see sta 11367740) since November 1965. Most of McCloud River runoff is diverted from reservoir through tunnel to Iron Canyon Reservoir (see sta 11363920) in Pit River basin. This station records fishwater release. Prior to water year 1974, flow was computed up to 400 ft^3/s (11.33 m^3/s). Because of channel changes, flow is computed only up to 200 ft^3/s (5.66 m^3/s). See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---	163	157	59	47		---	183		
2			---	166	147	48	46		---	190		
3			137	170	152	46	46		---	192		
4			119	168	141	43	46		---	196		
5			181	167	147	42	46		---	199		
6			---	167	147	42	50		---	199		
7			---	162	119	45	77		---	198		
8			---	126	96	54	80		---	196		
9			---	147	49	52	79		---	---		
10			---	152	46	48	76		---	---		
11			---	156	43	46	76		168	---		
12			---	160	58	45	71		162	---		
13			---	163	57	45	70		171	---		
14			---	162	47	44	74		168	---		
15			---	160	43	44	71		158	---		
16			187	155	42	44	60		172	---		
17			169	157	42	44	59		183	---		
18			176	158	71	50	64		176	---		
19			170	152	79	64	55		177	---		
20			175	152	89	54	44		176	---		
21			176	152	95	52	43		180	---		
22			173	152	94	50	43		181	---		
23			177	152	94	49	44		183	---		
24			178	152	108	49	46		173	---		
25			179	152	111	52	48		178	---		
26			179	149	104	194	47		180	---		
27			173	152	94	135	---		181	---		
28			174	153	88	51	---		182	---		
29			178	155	---	48	---		181	---		
30			180	158	---	48	---		182	---		
31			169	154	---	47	168		---	---		
TOTAL				4844	2550	1734						
MEAN				156	91.1	55.9						
MAX				170	157	194						
MIN				126	42	42						
AC-FT				9610	5060	3440						

11367800 McCLOUD RIVER AT AH-DI-NA, NEAR McCLOUD, CALIF.

LOCATION.--Lat 41°06'39", long 122°05'42", in NE¼SW¼ sec.33, T.38 N., R.2 W., Shasta County, Shasta National Forest, on right bank at Ah-Di-Na, 1.8 mi (2.9 km) downstream from Squirrel Creek, 3.9 mi (6.3 km) downstream from McCloud Dam, and 9.6 mi (15.4 km) south of McCloud.
DRAINAGE AREA.--427 mi² (1,106 km²).
PERIOD OF RECORD.--October 1964 to current year.
GAGE.--Water-stage recorder. Altitude of gage is 2,160 ft (658 m), from topographic map.
AVERAGE DISCHARGE (adjusted for diversion to Iron Canyon Reservoir and change in contents in Lake McCloud).--11 years, 1,364 ft³/s (38.63 m³/s), 988,200 acre-ft/yr (1.22 km³/yr).
EXTREMES.--Current year: Maximum discharge, 1,950 ft³/s (55.2 m³/s) May 15 (gage height, 4.55 ft or 1.387 m); minimum daily, 147 ft³/s (4.16 m³/s) Feb. 23.

Period of record: Maximum discharge prior to construction of McCloud Dam, 9,660 ft³/s (274 m³/s) Dec. 22, 1964 (gage height, 9.43 ft or 2.874 m), from rating curve extended above 2,500 ft³/s (70.8 m³/s); minimum daily, 86 ft³/s (2.44 m³/s) Oct. 1-26, 1964. Maximum discharge since construction of McCloud Dam in 1965, 26,400 ft³/s (748 m³/s) Jan. 16, 1974 (gage height, 13.68 ft or 4.170 m in gage well, 15.38 ft or 4.688 m, from floodmarks), from rating curve extended above 8,000 ft³/s (227 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 41 ft³/s (1.16 m³/s) Dec. 18-20, 1971 (caused by valve malfunction at dam).

Flood of Dec. 21, 1955, reached a stage of 12.5 ft or 3.81 m (discharge, 17,800 ft³/s or 504 m³/s, from rating curve extended above 2,500 ft³/s or 85.0 m³/s).
REMARKS.--Flow regulated by Lake McCloud 3.9 mi (6.3 km) upstream (see sta 11367740) since November 1965. Diversion to Iron Canyon Reservoir (see sta 11363920) through McCloud River diversion tunnel (see sta 11367720) started Dec. 1, 1965. See schematic diagram of Pit and McCloud River basins.
COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.
REVISIONS (WATER YEARS).--WRD Calif. 1974: 1956(M), 1970(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	231	219	212	159	164	189	211	422	745	192	205	201
2	230	210	215	160	160	402	199	520	684	198	202	212
3	229	228	236	165	164	367	191	775	631	199	202	213
4	228	228	209	163	160	275	181	746	577	201	203	206
5	228	227	203	163	160	238	174	573	533	205	203	207
6	228	226	208	164	165	224	164	506	528	204	202	209
7	228	233	211	168	166	339	183	479	520	203	200	208
8	228	230	210	161	174	623	182	526	508	200	202	207
9	228	228	209	161	335	561	175	649	431	204	202	207
10	226	228	215	161	290	394	173	696	286	206	201	207
11	226	227	210	162	210	302	173	765	208	204	202	209
12	228	226	210	162	468	249	173	749	198	204	205	214
13	228	225	205	165	651	223	176	827	202	204	199	211
14	228	225	205	164	373	195	182	883	200	203	203	210
15	228	225	205	163	245	185	178	1090	188	209	203	212
16	228	225	184	159	185	174	169	984	196	205	201	211
17	228	226	165	161	150	169	172	985	206	205	201	210
18	227	227	173	164	162	489	172	882	199	204	203	211
19	226	228	166	160	163	779	175	919	199	203	201	212
20	226	220	170	161	160	488	177	806	196	202	201	211
21	225	216	172	161	156	373	187	637	198	202	202	211
22	226	213	169	159	150	295	201	602	198	202	202	210
23	227	211	172	159	147	246	211	529	199	202	201	209
24	228	211	172	159	157	233	436	486	198	203	200	211
25	228	211	173	159	164	381	485	480	194	203	204	215
26	228	214	173	161	163	435	355	475	194	203	210	212
27	230	213	172	158	163	359	434	494	194	203	211	210
28	244	213	170	159	171	249	559	535	194	202	199	208
29	232	213	172	160	---	222	534	568	192	205	197	208
30	231	213	174	161	---	216	342	644	193	199	199	210
31	231	---	164	158	---	221	---	751	---	199	199	---
TOTAL	7087	6639	5904	5002	5976	10007	7324	20903	9389	6278	6265	6292
MEAN	229	221	190	161	213	323	244	674	313	203	202	210
MAX	244	233	236	168	651	779	559	1090	745	209	211	215
MIN	225	210	164	158	147	169	164	422	188	192	197	201
AC-FT	14060	13170	11710	9920	11850	19850	14530	41460	18620	12450	12430	12480
MEAN a	1,127	1,134	1,151	1,097	1,344	1,830	1,612	2,098	1,609	1,213	1,110	1,053
AC-FT a	69,300	67,480	70,790	67,470	74,620	112,500	95,950	129,000	95,760	74,570	68,230	62,640

CAL YR 1974 TOTAL 194461 MEAN 533 MAX 17300 MIN 164 AC-FT 385700 MEAN a 1,713 AC-FT a 1,240,000
WTR YR 1975 TOTAL 97066 MEAN 266 MAX 1090 MIN 147 AC-FT 192500 MEAN a 1,365 AC-FT a 988,300

a Adjusted for diversion to Iron Canyon Reservoir and change in contents in Lake McCloud.
Revised figures of monthly and yearly adjustments for diversion to Iron Canyon Reservoir and change in contents in Lake McCloud superseding those published for water year 1973 are given herewith:

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
Mean	878	926	1,039	1,320	1,481	1,532	1,471	1,462	1,078	953	895	871
Ac-ft	53,970	55,100	63,870	81,180	82,240	94,220	87,530	89,870	64,120	58,600	55,060	51,840

Cal yr 1972 Mean 1,164 Ac-ft 842,400
Wtr yr 1973 Mean 1,157 Ac-ft 837,600

11368000 McCLOUD RIVER ABOVE SHASTA LAKE, CALIF.

LOCATION.--Lat 40°57'30", long 122°13'07" (unsurveyed), T.36 N., R.3 W., Shasta County, on right bank just upstream from Shasta Lake, 0.2 mi (0.3 km) downstream from Big Bollibokka Creek, and 11.3 mi (18.2 km) east of Lamoine.

DRAINAGE AREA.--604 mi² (1,564 km²).

PERIOD OF RECORD.--October 1945 to current year. Prior to 1950, published as "above Shasta Reservoir."

GAGE.--Water-stage recorder. Datum of gage is 1,100.00 ft (335.280 m) above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE (prior to regulation by Lake McCloud and diversion to Pit River basin).--20 years (1945-65), 1,699 ft³/s (48.12 m³/s), 1,230,000 acre-ft/yr (1.52 km³/yr); 10 years (1965-75), 889 ft³/s (25.18 m³/s), 644,100 acre-ft/yr (794 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,260 ft³/s (234 m³/s) Mar. 19 (gage height, 17.00 ft or 5.182 m); minimum daily, 275 ft³/s (7.79 m³/s) Jan. 2.
Period of record: Maximum discharge, 45,500 ft³/s (1,290 m³/s) Jan. 16, 1974 (gage height, 28.26 ft or 8.614 m), from rating curve extended above 15,000 ft³/s (425 m³/s) on basis of slope-area measurement of maximum flow; minimum daily, 109 ft³/s (3.09 m³/s) Dec. 16-20, 1971.

REMARKS.--Flow partially regulated by Lake McCloud (see sta 11367740) since Nov. 3, 1965. Diversions to Iron Canyon Reservoir (see sta 11363920) began Dec. 1, 1965. See schematic diagram of Pit and McCloud River basins. Chemical-quality data for this station are published in the partial-record section of this report.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1445: 1953(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	326	343	318	278	421	1010	1350	1240	1140	396	330	303
2	325	317	374	275	501	2730	1250	1360	1080	399	327	306
3	325	336	1010	282	553	2290	1180	1510	990	400	325	317
4	325	336	1250	289	801	1700	1110	1600	927	398	324	307
5	323	336	568	300	583	1390	1070	1390	860	402	323	299
6	323	335	459	324	610	1290	992	1220	849	397	320	303
7	322	374	421	399	1020	2080	965	1170	831	393	317	304
8	321	372	394	740	1230	4520	934	1190	813	388	316	299
9	323	343	374	503	3520	3990	887	1270	756	385	317	300
10	323	338	374	422	3000	2780	883	1370	590	381	313	302
11	319	336	360	382	1860	2120	883	1410	492	370	314	300
12	322	333	365	356	4400	1720	881	1420	471	369	312	306
13	321	331	353	345	6240	1550	911	1460	460	367	311	306
14	320	331	349	337	3140	1340	996	1640	460	363	311	303
15	320	332	345	339	1930	1290	992	1650	455	399	311	304
16	319	332	331	337	1400	1310	931	1700	445	388	308	303
17	319	331	296	343	1100	1380	892	1480	460	377	313	302
18	321	353	307	355	949	4410	869	1600	445	369	325	302
19	319	337	295	356	916	6400	892	1510	440	364	318	304
20	318	331	297	352	836	3590	906	1350	430	360	314	303
21	318	455	304	348	758	2650	922	1140	425	357	312	300
22	318	421	294	340	698	2090	942	1100	420	354	311	299
23	319	347	290	332	659	1760	1010	1080	420	349	308	297
24	320	334	289	328	649	1760	1980	930	476	345	307	298
25	321	357	290	329	691	3600	2350	908	435	342	304	302
26	323	338	289	351	722	2820	1780	888	425	337	311	303
27	333	333	352	328	756	2170	1560	880	420	335	315	298
28	440	327	318	319	819	1710	1590	930	410	333	312	296
29	355	323	301	311	---	1490	1520	948	405	345	302	294
30	342	321	301	307	---	1430	1260	1010	394	336	305	296
31	371	---	294	328	---	1430	---	1150	---	331	303	---
TOTAL	10194	10333	12162	10935	40760	71800	34686	39504	17624	11429	9739	9056
MEAN	329	344	392	353	1456	2316	1156	1274	587	369	314	302
MAX	440	455	1250	740	6240	6400	2350	1700	1140	402	330	317
MIN	318	317	289	275	421	1010	869	880	394	331	302	294
AC-FT	20220	20500	24120	21690	80850	142400	68800	78360	34960	22670	19320	17960

CAL YR 1974 TOTAL 461459 MEAN 1264 MAX 36300 MIN 289 AC-FT 915300
WTR YR 1975 TOTAL 278222 MEAN 762 MAX 6400 MIN 275 AC-FT 551900

11370000 SHASTA LAKE NEAR REDDING, CALIF.

LOCATION.--Lat 40°43'08", long 122°25'12", in SE¼NW¼ sec.15, *T.33 N., R.5 W., Shasta County*, in Shasta Dam on Sacramento River near right bank, 2 mi (3 km) downstream from Squaw Creek, and 9.5 mi (15.3 km) north of Redding.

DRAINAGE AREA.--6,421 mi² (16,630 km²), excluding Goose Lake basin.

PERIOD OF RECORD.--November 1942 to current year. Prior to 1950, published as Shasta Reservoir near Redding.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to July 10, 1944, nonrecording gage at various sites near dam at same datum.

EXTREMES.--Current year: Maximum contents, 4,543,000 acre-ft (5.60 km³) June 4 (elevation, 1,066.70 ft or (325.130 m); minimum, 3,195,000 acre-ft (3.94 km³) Jan. 6 (elevation, 1,016.17 ft or 309.729 m).

Period of record: Maximum contents, 4,550,300 acre-ft (5,611 hm³) May 19, 1967 (elevation, 1,066.94 ft or 325.203 m); minimum since reservoir first filled, 2,144,900 acre-ft (2,645 hm³) Nov. 22, 1961 (elevation, 965.54 ft or 294.297 m).

REMARKS.--Reservoir is formed by concrete gravity-type dam completed in 1949; regulation began Dec. 30, 1943. Usable capacity, 4,436,000 acre-ft (5,470 hm³) between elevations 737.75 ft (224.866 m), bottom of lowest set of river outlets and 1,067.0 ft (325.22 m), top of flashboard gates on drum-type spillway gates, above mean sea level. Dead storage, 115,700 acre-ft (143 hm³). Installation of flashboard gates on top of drum gates completed Nov. 12, 1964. Gates increased elevation to 1,067.0 ft (325.22 m), total capacity, 4,552,000 acre-ft (5,613 hm³). All water passes down the Sacramento River, most of which is through powerplant at dam. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records furnished by Bureau of Reclamation, rounded to Geological Survey standards.

REVISIONS.--WSP 1931: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

960	2,047,000	1,010	3,052,000
970	2,226,000	1,020	3,287,000
980	2,416,000	1,030	3,534,000
990	2,617,000	1,050	4,0[illegible]3,000
1,000	2,828,000	1,067	4,552,000

CONT NTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3654000	3548000	3328000	3204000	3220000	3579000	4071000	4523000	4539000	4393000	4074000	3714000
2	3651000	3543000	3321000	3203000	3223000	3605000	4094000	4525000	4540000	4385000	4058000	3705000
3	3648000	3538000	3340000	3203000	3232000	3629000	4117000	4529000	4542000	4378000	4043000	3700000
4	3644000	3537000	3351000	3198000	3242000	3646000	4136000	4531000	4543000	4368000	4030000	3697000
5	3642000	3535000	3354000	3196000	3248000	3661000	4154000	4532000	4542000	4357000	4019000	3698000
6	3638000	3537000	3352000	3195000	3260000	3676000	4170000	4532000	4541000	4348000	4007000	3699000
7	3634000	3534000	3351000	3203000	3279000	3708000	4186000	4532000	4541000	4343000	3996000	3700000
8	3630000	3531000	3341000	3213000	3304000	3760000	4200000	4532000	4537000	4338000	3985000	3699000
9	3625000	3522000	3331000	3218000	3357000	3791000	4214000	4531000	4534000	4331000	3969000	3696000
10	3621000	3512000	3325000	3220000	3395000	3811000	4227000	4531000	4531000	4326000	3952000	3690000
11	3615000	3505000	3310000	3218000	3417000	3822000	4238000	4531000	4528000	4316000	3940000	3687000
12	3613000	3495000	3294000	3216000	3483000	3827000	4248000	4530000	4528000	4298000	3928000	3681000
13	3610000	3487000	3282000	3217000	3557000	3834000	4260000	4531000	4527000	4281000	3918000	3680000
14	3603000	3479000	3269000	3219000	3584000	3836000	4273000	4532000	4524000	4272000	3910000	3674000
15	3599000	3469000	3257000	3220000	3596000	3840000	4288000	4534000	4521000	4267000	3900000	3666000
16	3593000	3459000	3247000	3221000	3602000	3840000	4302000	4538000	4512000	4260000	3887000	3657000
17	3587000	3450000	3241000	3221000	3602000	3850000	4314000	4539000	4501000	4252000	3873000	3651000
18	3587000	3441000	3236000	3219000	3601000	3925000	4326000	4540000	4491000	4245000	3862000	3645000
19	3585000	3432000	3232000	3218000	3604000	3975000	4339000	4542000	4481000	4232000	3854000	3642000
20	3575000	3421000	3229000	3216000	3601000	3969000	4350000	4540000	4472000	4221000	3844000	3640000
21	3568000	3418000	3222000	3216000	3594000	3961000	4362000	4539000	4464000	4210000	3834000	3637000
22	3563000	3412000	3214000	3215000	3589000	3951000	4374000	4536000	4455000	4200000	3825000	3628000
23	3561000	3404000	3209000	3214000	3581000	3938000	4387000	4534000	4446000	4190000	3812000	3621000
24	3558000	3397000	3205000	3215000	3572000	3932000	4417000	4534000	4438000	4178000	3798000	3614000
25	3557000	3387000	3204000	3213000	3565000	3962000	4445000	4533000	4431000	4167000	3788000	3608000
26	3556000	3378000	3204000	3211000	3563000	3972000	4468000	4534000	4424000	4154000	3779000	3602000
27	3559000	3368000	3212000	3210000	3567000	3982000	4490000	4534000	4416000	4134000	3771000	3589000
28	3561000	3362000	3210000	3211000	3574000	3988000	4506000	4532000	4411000	4122000	3764000	3582000
29	3558000	3352000	3207000	3212000	---	4002000	4515000	4532000	4411000	4109000	3754000	3577000
30	3554000	3339000	3205000	3212000	---	4022000	4519000	4534000	4402000	4096000	3740000	3570000
31	3554000	---	3204000	3218000	---	4046000	---	4537000	---	4086000	3727000	---
MAX	3654000	3548000	3354000	3221000	3604000	4046000	4519000	4542000	4543000	4393000	4074000	3714000
MIN	3554000	3339000	3204000	3195000	3220000	3579000	4071000	4523000	4402000	4086000	3727000	3570000
(a)	1,030.81	1,022.16	1,016.55	1,017.12	1,031.61	1,049.38	1,065.89	1,066.48	1,061.92	1,050.82	1,037.51	1,031.42
(b)	-104,000	-215,000	-135,000	+14,000	-356,000	+472,000	+473,000	+18,000	-134,000	-316,000	-359,000	-157,000
(c)	8,160	3,210	1,850	2,760	2,380	3,940	7,050	15,600	17,500	18,050	16,420	13,870

CAL YR 1974 b -176,000
WTR YR 1975 b -88,000

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11370500 SACRAMENTO RIVER AT KESWICK, CALIF.

LOCATION.--Lat 40°36'04", long 122°26'36", in SW¼NW¼ sec.28, T.32 N., R.5 W., Shasta County, on right bank 0.4 mi (0.6 km) upstream from Middle Creek, 0.8 mi (1.3 km) downstream from Keswick Dam, 1.6 mi (2.6 km) downstream from Keswick, and 10 mi (16 km) downstream from Shasta Dam.

DRAINAGE AREA.--6,468 mi² (16,752 km²), excluding Goose Lake basin.

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 479.81 ft (146.246 m) above mean sea level. Prior to Oct. 1, 1939, at site 1.5 mi (2.4 km) upstream at datum 20.2 ft (6.16 m) higher and Oct. 1, 1939, to Apr. 30, 1942, at site 1.5 mi (2.4 km) upstream at datum 15.2 ft (4.63 m) higher. Aug. 20, 1960, to July 3, 1973, auxiliary water-stage recorder at city of Redding pumping plant 2.1 mi (3.4 km) downstream.

AVERAGE DISCHARGE (adjusted for change in contents in and evaporation from Shasta Lake and transbasin diversion into Keswick Reservoir).--37 years, 8,747 ft³/s (247.7 m³/s), 6,337,000 acre-ft/yr (7,810 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 37,600 ft³/s (1,060 m³/s) Mar. 19 (gage height, 24.52 ft or 7.474 m); minimum daily, 5,990 ft³/s (170 m³/s) Apr. 1.

Period of record: Maximum discharge, 186,000 ft³/s (5,270 m³/s) Feb. 28, 1940 (gage height, 47.2 ft or 14.39 m, site and datum then in use), from rating curve extended above 75,000 ft³/s (2,120 m³/s) on basis of peak discharge at Kennet plus 4,000 ft³/s (113 m³/s) estimated inflow; minimum observed, 2,730 ft³/s (77.3 m³/s) Aug. 22, 1939. Maximum discharge since construction of Shasta Dam in 1944, 81,400 ft³/s (2,310 m³/s) Apr. 1, 1974 (gage height, 31.92 ft or 9.729 m); maximum gage height, 32.22 ft (9.821 m) Jan. 24, 1970; minimum discharge, 154 ft³/s (4.36 m³/s) May 15, 1948.

REMARKS.--Records good. Flow regulated by Shasta Dam beginning Dec. 30, 1943 (see sta 11370000). Diurnal fluctuations from Shasta powerplant re-regulated by Keswick Reservoir, capacity, 4,170 acre-ft (5.14 hm³) between normal operation elevations 579.0 ft (176.48 m) and 586.0 ft (178.61 m) and powerplant. No diversion for irrigation between Shasta Dam and station at Keswick. Since December 1963, water is released from Whiskeytown Lake (see sta 11371700) at lat 40°37'03", long 122°31'31", through a tunnel to Spring Creek powerplant (see sta 11371600) and then into Keswick Reservoir. See schematic diagram of Pit and McCloud River basins.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8380	9700	10300	6180	6350	8710	5990	14000	13100	12300	12600	12500
2	8380	8460	10300	6220	6390	8190	6080	14000	13100	12300	12600	12500
3	8400	7370	10600	6200	6330	8230	6420	15100	13300	12300	12600	10900
4	8470	6350	10200	6210	6350	8140	8150	14900	13500	12200	12600	10200
5	8370	6250	10200	6220	6350	8110	8590	15100	13800	12300	12600	8840
6	8370	6210	10300	6510	6350	8140	8200	15700	14100	12300	12600	8640
7	8350	6650	10300	6270	6490	10200	8500	15000	14000	12300	12500	8620
8	8380	8290	10300	6220	6510	15200	8470	15000	14000	12300	12700	8720
9	8440	10200	10300	6230	6600	17900	8440	15000	14000	12300	12600	8740
10	8340	10300	10300	6170	6500	18100	8390	15000	14100	12300	12400	8840
11	8360	10300	10300	6190	8300	18000	8480	15000	14100	12300	12700	8840
12	8440	10400	10300	6210	12200	17600	9980	15000	14000	12300	12500	8670
13	8500	10300	10400	6210	15100	16000	10000	15000	14000	12300	12500	8650
14	8460	10400	10300	6210	16600	16800	9920	15000	13900	12300	12500	8640
15	8480	10400	10300	6200	16300	15800	8570	15000	14000	12300	12500	8630
16	8420	10300	10200	6130	16300	17200	8530	15000	14000	12200	12500	8630
17	8430	10300	9400	6150	16000	16300	9940	15000	14000	12200	12500	8640
18	8480	10300	8110	6200	14300	22300	10000	14900	14000	12200	12500	8610
19	9610	10300	8170	6170	14000	33900	10100	14800	13300	12200	12500	8670
20	10600	10300	8140	6170	13800	37300	9950	13900	13200	12200	12500	8610
21	10600	10400	8070	6180	13800	35400	10000	13900	12500	12200	12600	8640
22	10500	10300	8020	6160	13900	29600	9980	13900	12400	12200	12500	8660
23	8760	10300	8080	6250	13800	29400	9960	13200	12400	12300	12500	8640
24	8460	10300	7990	6270	13700	29500	10100	13100	12400	12500	12500	8630
25	8460	10300	7160	6320	12100	27600	10900	13100	12400	12600	12500	8610
26	8540	10300	6220	6270	10300	23700	10800	13100	12400	12400	12600	8550
27	8560	10300	6240	6270	8240	19500	10800	13100	12300	12500	12500	8590
28	8550	10300	6180	6290	8100	18100	10800	13100	12400	12500	12500	8590
29	9620	10300	6150	6250	---	12800	12700	13100	12400	12500	12500	8570
30	10500	10300	6160	6270	---	8670	13900	13100	12400	12400	12500	8570
31	10500	---	6190	6250	---	6340	---	13100	---	12500	12400	---
TOTAL	274710	286180	275120	193020	301060	562230	282720	443200	399560	381920	388900	271140
MEAN	8862	9539	8875	6226	10750	18140	9424	14300	13320	12320	12545	9038
MAX	10600	10400	10600	6510	16600	37300	13900	15700	14100	12600	12700	12500
MIN	8340	6210	6150	6130	6330	6340	5990	13100	12300	12200	12400	8550
AC-FT	544900	567600	545700	382900	597200	1115000	560800	879100	792400	757700	770800	537800
MEAN a	4,910	5,413	6,206	5,976	15,940	23,550	13,940	13,350	8,114	5,162	4,708	4,516
AC-FT a	301,900	322,100	381,000	367,600	885,200	1,448M	829,400	820,800	482,800	317,400	289,500	268,700

CAL YR 1974 TOTAL 5,718,700 MEAN 15,670 MAX 79,700 MIN 6,000 AC-FT 11,340,000 MEAN a 12,480 AC-FT a 9,037,000
WTR YR 1975 TOTAL 4,059,480 MEAN 11,120 MAX 37,300 MIN 5,990 AC-FT 8,052,000 MEAN a 9,275 AC-FT a 6,715,000

a Adjusted for change in contents in and evaporation from Shasta Lake and transbasin diversion into Keswick Reservoir.

11370500 SACRAMENTO RIVER AT KESWICK, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water years 1951 and 1953 (partial-record station), December 1953 to current year. Published as "near Keswick" in 1951 and 1953; as "at Keswick Dam, near Keswick" in 1968-69.

REMARKS.--Records furnished by California Department of Water Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
OCT. 11...	1010	8520	96	7.3	11.0	6	10.7
NOV. 14...	1450	10400	115	7.0	12.0	4	9.9
DEC. 05...	0920	10200	120	7.0	11.0	6	10.1
JAN. 15...	1330	6210	124	7.2	9.0	5	11.3
FEB. 06...	1145	6280	114	7.2	8.0	3	12.2
MAR. 05...	1130	8040	113	7.2	8.5	4	10.7
20...	1345	--	86	--	--	--	--
APR. 21...	1100	9950	100	7.1	10.5	4	11.0
MAY 19...	1200	14800	108	7.4	11.0	5	10.3
JUNE 17...	0925	14000	102	7.4	11.0	3	10.2
JULY 22...	1045	12100	108	7.2	12.0	3	10.2
AUG. 20...	1045	12600	102	7.1	12.0	3	9.7
SEP. 11...	1125	8790	96	7.1	13.5	1	9.4

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
APR. 21...	1100	9950	5.0	50	0	41	1.4
SEP. 11...	1125	8790	3.8	52	0	43	.5

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED BORON (B) (UG/L)
APR. 21...	.06	.20	.03	38	0	.4	0
SEP. 11...	.04	.10	.02	40	0	.3	0

11371000 CLEAR CREEK AT FRENCH GULCH, CALIF.

LOCATION.--Lat 40°41'42", long 122°38'08" (unsurveyed), Shasta County, on right bank 1,200 ft (366 m) downstream from French Gulch, 0.3 mi (0.5 km) south of town of French Gulch, and 15 mi (24 km) northwest of Redding.

DRAINAGE AREA.--115 mi^2 (298 km^2).

PERIOD OF RECORD.--July 1950 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,320.60 ft (402.519 m) above mean sea level. Prior to Dec. 28, 1959, water-stage recorder at datum 3.00 ft (0.914 m) higher.

AVERAGE DISCHARGE.--2[illegible] years, 227 ft^3/s (6.429 m^3/s), 164,500 acre-ft/yr (203 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,860 ft^3/s (138 m^3/s) Mar. 8 (gage height, 11.38 ft or 3.469 m); minimum daily, 13 ft^3/s (0.37 m^3/s) Sept. 27, 30.
Period of record: Maximum discharge, 14,600 ft^3/s (413 m^3/s) Jan. 16, 1974 (gage height, 14.99 ft or 4.569 m), from rating curve extended above 5,200 ft^3/s (147 m^3/s) on basis of slope-area measurement of peak flow; minimum, 3.9 ft^3/s (0.11 m^3/s) Sept. 6-8, 1955.

REMARKS.--Records fair. No large diversion above station. See schematic diagram of Pit and McCloud River basins.

REVISIONS.--WSP 1285: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	30	35	53	81	443	833	452	160	66	24	20
2	15	29	75	51	83	856	750	452	156	64	23	19
3	16	28	826	50	87	748	693	451	148	62	22	18
4	16	28	494	52	173	601	645	435	140	58	22	17
5	16	28	154	63	145	546	603	399	134	55	21	17
6	16	28	102	107	181	531	545	372	127	53	22	16
7	16	34	81	178	451	2360	508	359	123	50	22	15
8	17	39	70	409	680	4390	479	355	117	47	22	15
9	18	33	62	254	1540	2330	467	350	113	44	21	16
10	18	32	58	179	1160	1540	435	358	109	43	20	17
11	17	31	55	137	756	1170	428	341	106	41	20	17
12	17	30	57	114	1430	932	438	323	102	38	19	16
13	16	30	56	103	1800	828	475	322	99	36	19	15
14	16	29	55	102	1140	719	524	324	94	36	19	15
15	16	29	54	105	772	688	496	318	92	50	20	15
16	16	30	53	109	589	710	451	301	89	53	20	16
17	16	31	52	113	470	719	418	286	87	46	21	15
18	16	40	50	119	397	1420	391	275	87	43	25	16
19	16	38	49	122	407	1900	381	260	88	39	26	15
20	16	33	48	117	381	1400	388	257	88	36	23	16
21	17	129	48	109	337	1170	398	242	82	33	21	15
22	17	83	47	99	305	982	412	231	79	30	21	15
23	18	69	46	90	286	877	445	221	77	29	20	15
24	19	61	45	86	279	946	639	212	83	28	19	14
25	20	44	45	84	298	1800	755	203	82	26	19	14
26	20	40	44	82	312	1530	631	196	77	25	19	14
27	25	38	65	76	322	1200	555	189	73	24	19	13
28	57	37	67	69	371	974	510	181	70	24	23	14
29	35	36	59	60	---	850	481	175	67	25	22	14
30	29	36	58	56	---	837	465	168	66	25	21	13
31	32	---	53	66	---	899	---	162	---	26	20	---
TOTAL	615	1159	3063	3414	15233	36898	15619	9186	3015	1255	655	467
MEAN	19.8	38.6	98.8	110	544	1190	521	296	101	40.5	21.1	15.6
MAX	57	129	826	409	1800	4390	833	452	160	66	26	20
MIN	15	28	35	50	81	443	381	162	66	24	19	13
AC-FT	1220	2300	6080	6770	30210	73190	30980	18220	5980	2490	1300	926

CAL YR 1974 TOTAL 129482 MEAN 355 MAX 12000 MIN 14 AC-FT 256800
WTR YR 1975 TOTAL 90579 MEAN 248 MAX 4390 MIN 13 AC-FT 179700

Peak discharge (base, 1,500 ft^3/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
12-3	1930	7.40	1,840	3-8	0230	11.38	4,860
2-9	0300	8.14	1,890	3-18	2400	7.75	2,090
2-13	0400	8.16	2,040	3-25	0930	7.44	1,940

11525430 JUDGE FRANCIS CARR POWERPLANT NEAR FRENCH GULCH, CALIF.

LOCATION.--Lat 40°38'49", long 122°37'34" (unsurveyed), Shasta County, at powerplant 1.6 mi (2.6 km) downstream from Mill Creek, and 3.8 mi (6.1 km) south of French Gulch.

PERIOD OF RECORD.--April 1963 to current year.

GAGE.--Recorded powerplant output.

AVERAGE DISCHARGE.--12 years, 1,744 ft³/s (49.39 m³/s), 1,264,000 acre-ft/yr (1,560 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 3,910 ft³/s (111 m³/s) Feb. 11, 1970; no flow for several days in many years.

REMARKS.--Water is diverted from Trinity River at NW¼SE¼ sec.8, T.33 N., R.8 W., through a tunnel to powerplant and then into Whiskeytown Lake (see sta 11371700). See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records furnished by Bureau of Reclamation, rounded to Geological Survey standards.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1670	298	257	253	314	408	2840	949	2410	2630	1140	2620
2	1670	257	260	262	315	401	2850	939	2460	2630	2770	2620
3	1660	217	442	283	316	398	2960	940	2890	2630	1030	2630
4	1660	270	300	261	319	398	2960	941	3350	2630	1180	2690
5	1720	267	298	253	321	487	2990	1070	3350	2630	781	2650
6	1720	257	330	253	320	405	2960	1100	3350	2630	1160	2620
7	1430	252	304	276	316	313	2960	1040	3450	2630	1310	2620
8	1210	295	360	328	305	270	2960	1080	3450	2650	963	2610
9	1740	276	295	320	148	210	2960	1080	3440	2620	974	2610
10	1270	263	307	316	148	0	2960	1010	3430	2620	976	2610
11	1150	380	334	324	142	0	2960	779	3440	2620	2730	2610
12	1520	298	255	318	140	0	2970	806	3260	2620	2240	2610
13	1580	259	332	454	146	4.0	2970	703	2850	2620	2930	2610
14	1700	318	340	456	139	413	2910	2170	2310	2620	2950	2610
15	1520	360	320	482	0	505	2910	1950	2900	2620	2880	1610
16	1750	330	258	319	0	744	2910	1790	3330	2620	2630	1560
17	1580	301	461	305	0	552	2910	824	3330	2620	2630	1540
18	1560	363	585	299	447	24	2970	833	3250	2620	2630	1520
19	3320	382	398	320	361	246	2970	830	2710	2620	2630	1500
20	3320	409	450	320	345	158	2970	0	2490	2620	2630	1500
21	3330	317	365	344	321	124	2970	0	2610	1120	2630	1500
22	3070	289	386	422	367	0	2880	0	3140	1200	2650	1490
23	3080	262	325	316	447	0	2940	0	2490	1290	2630	1160
24	3140	256	315	316	430	0	2910	1110	2640	836	2630	1500
25	3140	256	322	320	424	256	2910	1660	2760	1770	2630	1500
26	3140	261	314	316	391	258	2860	1650	2570	2620	2630	1500
27	3140	282	316	315	361	71	2970	1980	2630	1140	2620	1500
28	3140	262	495	316	358	800	2970	1880	2630	1170	2620	1500
29	3250	246	319	319	---	1010	1010	1960	2630	1160	2620	1500
30	3210	246	320	318	---	1070	752	2340	2630	1140	2620	1500
31	3200	---	263	320	---	2070	---	2320	---	1150	2620	---
TOTAL	69590	8729	10626	10024	7641	11595.0	84022	35734	88180	67096	68064	60600
MEAN	2245	291	343	323	273	374	2801	1153	2939	2164	2196	2020
MAX	3330	409	585	482	447	2070	2990	2340	3450	2650	2950	2690
MIN	1150	217	255	253	0	0	752	0	2310	836	781	1160
AC-FT	138000	17310	21080	19880	15160	23000	166700	70880	174900	133100	135000	120200

CAL YR 1974 TOTAL 881308.00 MEAN 2415 MAX 3630 MIN 0 AC-FT 1748000
WTR YR 1975 TOTAL 521901.00 MEAN 1430 MAX 3450 MIN 0 AC-FT 1035000

11371600 SPRING CREEK POWERPLANT AT KESWICK, CALIF.

LOCATION.--Lat 40°37'41", long 122°27'59", in NE¼SE¼ sec.18, T.32 N., R.5 W., Shasta County, at powerplant on Spring Creek, 0.4 mi (0.6 km) northwest of Keswick, and 4.9 mi (7.9 km) northwest of Redding.

PERIOD OF RECORD.--December 1963 to current year.

GAGE.--Discharge computed from powerplant output.

AVERAGE DISCHARGE.--11 years, 2,187 ft^3/s (61.94 m^3/s), 1,584,000 acre-ft/yr (1.95 km^3).

EXTREMES.--Period of record: Maximum daily discharge, 4,700 ft^3/s (133 m^3/s) Jan. 21, 1971; no flow Mar. 30, Apr. 2, 1974, May 21, 1975.

REMARKS.--Water is released from Whiskeytown Lake (see sta 11371700) at lat 40°37'03", long 122°31'31", through a tunnel to powerplant and then into Keswick Reservoir. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records furnished by Bureau of Reclamation, rounded to Geological Survey standards.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1630	1290	291	370	926	394	3890	1900	2500	2770	1290	2690
2	1660	473	357	359	924	1200	3820	1820	2760	2750	1140	2680
3	1820	440	739	330	800	1650	3670	1810	2820	2740	1530	2820
4	1660	440	1690	310	471	1680	3850	1330	3890	2740	1440	3400
5	1730	395	1320	313	925	1670	3890	1540	3900	2800	2430	3450
6	1710	370	866	313	925	1710	3940	1560	3990	2890	1400	3530
7	1560	404	456	493	966	1920	3890	1360	3880	2960	1290	3480
8	1560	439	589	566	1200	4000	2500	1540	3880	2910	1220	3410
9	1890	398	479	913	1930	4250	3860	1530	3880	2830	823	3410
10	1730	285	607	1190	2120	4300	3440	1190	3880	2830	857	3410
11	1530	473	446	487	2040	4310	3950	1340	3880	2830	2520	3230
12	1390	348	381	602	2030	4190	3060	1260	3870	2760	2550	1880
13	948	386	221	606	2040	2250	3040	1060	3690	2820	2330	1870
14	961	364	286	569	2030	2130	3140	1180	2690	2750	2530	1870
15	1720	680	339	643	2040	2110	3600	1290	3110	2740	2550	1010
16	1710	635	340	595	2040	3090	4010	1740	3410	2770	2730	993
17	1680	676	338	549	2040	1420	4190	1420	3400	2750	2740	1520
18	1850	750	414	485	1300	1370	4110	1340	3370	2750	2680	1420
19	3530	778	498	402	1150	1890	3830	1350	3340	2750	2680	1390
20	3520	780	496	404	1060	2030	3790	185	2880	2930	2690	1360
21	3520	767	355	413	1060	1950	3640	0	2830	1530	2700	1440
22	3100	736	368	381	1050	2030	3590	6.0	2630	1370	2810	1440
23	3080	723	436	369	956	2030	3600	2.0	2860	1240	2960	1050
24	3270	514	382	597	1030	2030	3840	1160	2870	1550	2900	1660
25	3320	832	364	602	879	2030	3830	2120	3020	1530	2760	1610
26	3320	815	350	598	718	2030	4220	2090	2750	1420	2750	1550
27	3460	748	385	597	590	2060	4160	2470	2900	1310	2760	1410
28	3460	569	568	530	456	2270	3950	2320	2740	1390	2760	1460
29	3740	290	362	462	---	2280	1850	2320	2870	1330	2770	1430
30	3920	282	517	457	---	2670	1400	2890	2760	1340	2750	1430
31	3940	---	531	460	---	2950	---	2980	---	1470	2620	---
TOTAL	73919	17080	15771	15965	35696	71894	106650	46103.0	97250	71550	69960	63303
MEAN	2384	569	509	515	1275	2319	3555	1487	3242	2308	2257	2110
MAX	3940	1290	1690	1190	2120	4310	4220	2980	3990	2960	2960	3530
MIN	948	282	221	310	456	394	1400	0	2500	1240	823	993
AC-FT	146600	33880	31280	31670	70800	142600	211500	91450	192900	141900	138800	125600

CAL YR 1974 TOTAL 1123421.00 MEAN 3078 MAX 4660 MIN 0 AC-FT 2228000
WTR YR 1975 TOTAL 685141.00 MEAN 1877 MAX 4310 MIN 0 AC-FT 1359000

11371700 WHISKEYTOWN LAKE NEAR IGO, CALIF.

LOCATION.--Lat 40°37'03", long 122°31'31" (unsurveyed), Shasta County, at outlet works to Spring Creek powerplant on Clear Creek, 1.8 mi (2.9 km) downstream from Whiskey Creek, and 7.8 mi (12.6 km) northeast of Igo.
DRAINAGE AREA.--200 mi^2 (518 km^2).
PERIOD OF RECORD.--May 1963 to current year. Prior to October 1964 published as Whiskeytown Reservoir near Igo.
GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation).
EXTREMES.--Current year: Maximum contents, 239,700 acre-ft (296 hm^3) Aug. 2 (elevation, 1,209.56 ft or 368.674 m); minimum, 200,100 acre-ft (247 hm^3) Feb. 25 (elevation, 1,196.60 ft or 364.724 m).
Period of record: Maximum contents, 253,100 acre-ft (312 hm^3) Mar. 30, 1974 (elevation, 1,213.69 ft or 369.933 m); minimum since reservoir was first filled, 159,000 acre-ft (196 hm^3) Oct. 25, 1970 (elevation, 1,181.48 ft or 360.115 m).
REMARKS.--Reservoir is formed by earth- and rockfill dam. Storage began in May 1963. Capacity, 241,100 acre-ft (297 hm^3) between elevations 1,100.00 ft (335.280 m), minimum operating level and 1,210.00 ft (368.808 m), crest of spillway. No dead storage. Transbasin water enters the reservoir through Judge Francis Carr powerplant (see sta 11525430) and is released through Spring Creek tunnel to Spring Creek powerplant (see sta 11371600) and Keswick Reservoir. Records, including extremes, represent contents at 2400 hours. See schematic diagram of Pit and McCloud River basins.
COOPERATION.--Records furnished by Bureau of Reclamation.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

1,015	714	1,080	15,100
1,020	994	1,100	27,500
1,030	1,800	1,120	46,700
1,040	3,060	1,140	74,000
1,050	4,900	1,180	155,300
1,060	7,420	1,220	274,400

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218000	216100	202400	202300	202200	203000	219400	228100	237700	238200	236300	237900
2	218100	215700	203100	202200	201400	204400	220000	227700	237800	238200	239700	237900
3	217800	215200	206500	202300	201300	204300	221000	227400	238800	238300	238800	237800
4	217900	214800	205500	202300	201800	203500	221500	227900	238600	238500	238400	236600
5	218000	214500	204000	202500	201300	202800	221900	228200	238400	238500	235300	235300
6	218100	214300	203300	202900	201300	201900	221900	228400	238000	238300	234800	233600
7	217900	214100	203200	203200	201900	209800	221900	228900	238000	237800	235000	232100
8	217300	213800	202900	204000	203000	218600	224600	229100	238100	237700	234500	230700
9	217100	213500	202600	203700	205400	218600	224500	229300	238200	237500	234800	229300
10	216300	213400	202100	202500	205400	215800	225000	230100	238300	237400	235000	228000
11	215600	213200	201900	202700	203900	211400	226400	230100	238300	237300	235700	226900
12	215900	213100	201800	202500	206400	206400	227800	230200	237900	237200	235200	228500
13	217300	212800	202100	202700	209000	204900	229300	230400	236900	237200	236600	230100
14	218700	212700	202300	202900	208800	203700	230700	233500	236500	237200	237800	231700
15	218500	212000	202400	203000	207300	203500	231100	235900	236700	237400	238700	232900
16	218700	211400	202300	202800	205100	201600	230500	237000	237300	237400	238600	234100
17	218700	210700	202500	202600	202500	203700	229500	236800	237800	237500	238700	234100
18	218200	210000	202900	202600	202000	208400	228600	236700	238200	237500	238700	234400
19	218300	209200	202700	202900	201800	211900	228300	236500	237500	237600	238900	234600
20	218500	208400	202700	203100	201500	212800	228000	236800	237100	237200	238900	235000
21	218700	208300	202700	203200	201100	213900	228000	237500	237100	236500	239000	235200
22	219100	207600	202800	203600	200700	213500	228100	238100	238700	236300	239000	235300
23	219600	206800	202700	203800	200500	212800	228500	238800	238400	236600	238500	235600
24	219800	206300	202500	203500	200200	212800	229400	239300	238300	235300	238100	235300
25	219800	205300	202500	203200	200100	215900	230100	239100	238300	236000	238000	235000
26	219900	204200	202400	203000	200400	217500	229500	238900	238300	238500	238000	235000
27	220100	203300	203000	202700	200800	217400	229000	238600	238100	238200	237900	235200
28	220300	202700	203200	202500	201600	217700	228700	238300	238100	237800	237800	235300
29	219700	202600	203200	202400	---	218000	228500	238300	238100	237500	237700	235600
30	218900	202500	202900	202300	---	217600	228600	238000	238100	237100	237600	235600
31	218100	---	202400	202700	---	218700	---	237300	---	236500	237800	---
MAX	220300	216100	206500	204000	209000	218700	231100	239300	238800	238500	239700	237900
MIN	215600	202500	201800	202200	200100	201600	219400	227400	236500	235300	234500	226900
(a)	1,202.63	1,197.40	1,197.37	1,197.49	1,197.09	1,202.83	1,206.04	1,208.80	1,209.07	1,208.57	1,208.97	1,208.29
(b)	+400	-15,600	-100	+300	-1,100	+17,100	+9,900	+8,700	+800	-1,600	+1,300	-2,200
(c)	740	220	130	170	120	350	670	1,550	1,720	1,940	1,700	1,410

CAL YR 1974 b -10,500
WTR YR 1975 b +17,900

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11372000 CLEAR CREEK NEAR IGO, CALIF.

LOCATION.--Lat 40°30'48", long 122°31'23" (unsurveyed), Shasta County, on left bank at highway bridge on Redding-Igo Road 1.0 mi (1.6 km) northeast of Igo, 8.3 mi (13.4 km) southwest of Redding, and 10.4 mi (16.7 km) upstream from mouth.

DRAINAGE AREA.--228 mi^2 (590 km^2).

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 672.99 ft (205.127 m) above mean sea level.

AVERAGE DISCHARGE (adjusted for change in contents and diversions).--35 years, 468 ft^3/s (13.25 m^3/s), 339,100 acre-ft/yr (418 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,450 ft^3/s (183 m^3/s) Mar. 18 (gage height, 8.44 ft or 2.573 m); minimum daily, 43 ft^3/s (1.22 m^3/s) Sept. 23.

Period of record: Maximum discharge, 24,500 ft^3/s (694 m^3/s) Dec. 21, 1955 (gage height, 13.75 ft or 4.191 m); minimum, 8.6 ft^3/s (0.24 m^3/s) Sept. 4, 6, 7, 1950. Maximum discharge since contruction of Whiskeytown Dam in 1963, 9,940 ft^3/s (282 m^3/s) Dec. 22, 1964 (gage height, 9.23 ft or 2.813 m); minimum daily, 37 ft^3/s (1.05 m^3/s) many days in August and September 1966.

REMARKS.--Records excellent. Flow regulated by Whiskeytown Lake since May 1963 (see sta 11371700). Transbasin diversion from Trinity River through Judge Francis Carr powerplant to Whiskeytown Lake began in April 1963 (see sta 11525430). Diversions from Whiskeytown Lake to Spring Creek powerplant (see sta 11371600) began in December 1963. See schematic diagram of Pit and McCloud River basins.

REVISIONS (WATER YEARS).--WSP 1345: Drainage area. WSP 1395: 1941(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	70	97	81	108	94	178	112	61	51	48	46
2	47	94	131	55	107	111	165	108	62	51	48	46
3	48	94	317	55	110	100	159	107	61	50	54	46
4	47	95	161	56	181	93	152	103	59	50	47	45
5	47	95	113	61	127	90	158	100	59	50	48	44
6	47	95	105	90	196	103	143	97	58	49	48	44
7	47	98	102	110	351	417	139	94	57	49	48	44
8	48	97	100	163	343	592	139	93	56	49	48	44
9	48	95	99	91	501	418	129	92	56	49	48	44
10	48	95	99	76	295	451	124	91	55	48	48	45
11	47	96	99	70	181	326	119	90	55	48	48	45
12	47	95	99	66	1,630	241	116	87	55	48	46	44
13	47	95	98	63	1,120	216	115	85	54	48	46	45
14	47	95	99	62	346	181	123	82	54	48	46	44
15	48	95	98	61	223	195	116	79	53	53	46	45
16	47	95	97	59	171	257	110	77	53	51	46	45
17	48	96	92	58	141	636	106	75	53	50	47	44
18	48	98	97	58	125	2,500	103	73	53	50	48	44
19	48	97	97	57	158	1,150	102	72	53	49	48	44
20	47	96	97	56	142	478	99	71	54	49	48	44
21	47	99	97	56	124	465	97	70	53	48	47	44
22	48	100	96	55	115	505	97	69	52	48	47	44
23	48	98	96	55	107	467	117	68	53	48	47	43
24	48	98	95	55	101	657	251	68	56	48	46	44
25	48	99	95	55	97	1,040	199	67	53	48	46	44
26	48	97	95	54	92	491	161	65	54	48	46	44
27	52	97	181	54	89	350	142	65	54	48	47	44
28	69	97	144	54	87	274	131	63	53	48	47	44
29	51	97	111	54	------	234	123	63	53	49	47	44
30	50	97	105	54	------	217	117	61	51	49	47	44
31	52	------	102	58	------	198	------	61	------	48	47	------
TOTAL	1,509	2,865	3,514	2,052	7,368	13,547	4,030	2,508	1,653	1,520	1,456	1,331
MEAN	48.7	95.5	113	66.2	263	437	134	80.9	55.1	49.0	47.0	44.4
MAX	69	100	317	163	1,630	2,500	251	112	62	53	54	46
MIN	47	70	92	54	87	90	97	61	51	48	46	43
AC-FT	2,990	5,680	6,970	4,070	14,610	26,870	7,990	4,970	3,280	3,010	2,890	2,640
MEAN a	207	114	280	265	1,247	2,665	1,069	582	400	199	157	123
AC-FT a	12,720	6,790	17,200	16,320	69,260	163,890	63,630	35,800	23,810	12,240	9,650	7,300

CAL YR 1974 TOTAL 82,919 MEAN 227 MAX 6,940 MIN 47 AC-FT 164,500 MEAN a 891 AC-FT a 644,720
WTR YR 1975 TOTAL 43,353 MEAN 119 MAX 2,500 MIN 43 AC-FT 85,990 MEAN a 606 AC-FT a 438,610

a Adjusted for change in contents in and evaporation from Whiskeytown Lake, diversion from Trinity River through Judge Francis Carr powerplant, and diversion to Spring Creek powerplant, furnished by Bureau of Reclamation.

11372000 CLEAR CREEK NEAR IGO, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water year 1958 (partial-record station), October 1958 to September 1966.
Water temperatures: March 1965 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 19.5°C on several days during June to August; minimum, 2.0°C sometime during period Jan. 13 to Feb. 6.
Period of record:
Water temperatures: Maximum, 21.0°C July 1, 1967; minimum, 2.0°C sometime during periods Jan. 3 to Feb. 1, 1968, and Jan. 13 to Feb. 6, 1975.

REMARKS.--Clock stopped Oct. 10-18, Nov. 14 to Dec. 2, Jan. 13 to Feb. 6; range in temperature, 12.0°C to 14.5°C, 8.5°C to 11.0°C, and 2.0°C to 7.5°C, respectively.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	13.0	11.5	10.5	---	---	6.0	5.0	---	---	9.0	8.5
2	14.5	13.5	11.0	9.5	---	---	5.5	4.0	---	---	9.5	8.5
3	15.0	14.0	11.0	10.0	9.5	9.0	5.5	4.5	---	---	9.5	7.5
4	15.0	13.5	11.0	9.5	9.5	9.0	6.0	5.5	---	---	8.5	7.5
5	14.0	12.5	10.5	9.0	9.5	8.0	6.0	6.0	---	---	8.5	8.0
6	13.5	12.0	10.5	9.5	10.0	9.0	6.5	6.0	---	---	8.5	8.5
7	13.5	12.0	10.5	10.0	10.0	8.5	7.0	6.5	7.0	6.0	9.5	8.5
8	13.5	12.5	10.0	9.0	9.5	8.0	7.0	6.5	7.5	6.5	10.0	9.5
9	13.5	12.5	10.5	9.0	9.0	8.0	7.0	5.5	7.5	7.0	9.5	8.5
10	---	---	10.5	9.0	9.0	8.0	6.5	6.0	7.5	6.0	10.0	8.5
11	---	---	10.5	9.5	9.0	8.5	6.0	5.0	7.5	7.0	10.0	8.0
12	---	---	10.5	9.5	9.0	8.5	6.5	5.5	7.5	7.0	9.5	7.5
13	---	---	11.0	9.0	8.5	8.0	---	---	9.0	7.5	9.5	8.0
14	---	---	---	---	9.0	8.5	---	---	7.5	6.0	9.5	7.0
15	---	---	---	---	9.0	8.0	---	---	6.5	5.0	9.5	7.5
16	---	---	---	---	9.0	8.0	---	---	6.0	5.0	8.5	6.5
17	---	---	---	---	9.0	8.0	---	---	6.0	4.5	8.5	7.5
18	---	---	---	---	8.0	7.5	---	---	6.5	5.5	9.5	8.5
19	12.5	12.0	---	---	8.0	7.0	---	---	6.5	6.0	10.5	8.5
20	13.0	12.0	---	---	8.0	7.5	---	---	6.5	5.5	9.5	7.5
21	12.5	11.5	---	---	8.0	7.5	---	---	5.5	4.5	8.5	4.0
22	12.5	11.5	---	---	7.5	6.5	---	---	6.5	4.5	9.0	6.5
23	12.0	11.5	---	---	7.0	6.0	---	---	7.0	5.0	9.0	7.5
24	12.0	11.0	---	---	7.0	5.5	---	---	7.5	6.0	9.0	8.0
25	12.0	11.0	---	---	7.0	6.0	---	---	8.0	6.5	10.0	7.5
26	12.5	11.5	---	---	7.5	6.5	---	---	7.5	7.0	9.0	7.0
27	12.0	11.5	---	---	7.0	5.5	---	---	8.5	8.0	9.0	6.5
28	12.0	11.5	---	---	6.0	5.5	---	---	9.0	8.0	8.5	5.5
29	12.0	11.0	---	---	6.0	5.0	---	---	---	---	9.5	6.0
30	11.5	10.5	---	---	6.5	5.5	---	---	---	---	10.0	7.5
31	11.5	11.0	---	---	6.0	5.0	---	---	---	---	9.0	7.0
MONTH	---	---	---	---	10.0	5.0	---	---	9.0	4.5	10.5	4.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	6.0	12.5	10.0	17.0	15.0	16.0	14.5	18.5	16.0	18.0	15.5
2	8.5	6.5	12.5	10.5	17.0	15.0	16.5	14.5	18.5	16.0	17.5	15.0
3	8.0	7.0	13.5	11.0	18.0	15.5	17.0	15.0	18.0	16.0	17.0	15.0
4	8.0	6.5	11.0	9.0	18.5	16.0	17.0	15.5	19.5	17.0	17.5	15.0
5	7.5	6.0	12.0	9.5	18.0	16.5	17.0	15.0	18.5	16.5	17.0	15.0
6	8.0	6.0	13.0	10.5	18.5	16.0	18.5	15.0	18.5	16.0	17.0	15.0
7	7.5	7.0	14.0	11.5	18.5	16.5	18.5	16.5	18.0	15.5	17.0	15.0
8	9.0	7.0	14.5	12.0	18.0	16.0	18.5	16.5	18.5	16.0	17.0	15.0
9	9.5	6.5	14.5	13.0	18.0	15.5	18.5	16.0	18.5	17.0	16.5	15.0
10	10.0	8.0	13.5	12.5	18.0	16.0	18.0	16.5	18.5	16.5	15.5	14.5
11	10.5	8.0	14.5	11.5	18.5	16.0	18.5	16.0	19.0	16.5	17.0	15.0
12	10.5	8.0	15.0	12.5	18.5	16.5	19.0	16.5	18.5	16.5	17.0	15.5
13	10.5	8.5	15.5	13.0	18.5	16.5	19.0	17.0	19.0	17.0	17.5	15.5
14	10.0	7.5	16.0	14.0	19.5	16.5	18.5	16.5	19.0	17.0	17.0	15.5
15	8.0	6.5	15.5	14.0	19.5	17.5	17.0	14.5	19.0	16.5	16.5	15.0
16	9.0	6.0	15.5	13.0	19.5	17.5	17.5	14.5	19.0	17.0	16.5	14.5
17	9.0	7.0	16.0	13.5	18.5	16.0	18.0	17.0	18.0	16.0	16.5	14.5
18	10.5	8.5	16.5	14.0	17.0	15.0	19.0	16.5	16.5	15.5	16.0	14.5
19	12.0	10.0	17.0	13.5	17.0	15.5	19.0	17.0	18.5	16.5	16.0	14.5
20	11.5	9.5	14.5	12.0	17.5	15.0	19.0	17.0	18.5	16.5	16.5	14.5
21	12.0	9.5	14.5	12.0	18.5	16.0	19.0	17.0	18.5	17.0	16.0	14.5
22	12.0	10.0	15.5	13.0	18.0	15.5	19.5	17.0	19.0	17.0	15.5	14.0
23	11.0	9.0	16.0	13.5	17.0	15.5	19.5	17.5	18.5	17.0	16.0	14.0
24	10.5	9.0	17.0	14.5	15.5	14.0	19.5	17.0	18.5	16.5	16.0	14.0
25	10.0	7.5	16.0	13.5	16.0	13.0	19.5	16.5	19.0	17.0	16.0	14.0
26	10.5	7.0	16.5	13.5	17.0	14.5	19.5	17.0	19.0	17.0	15.5	14.0
27	11.5	8.5	17.0	14.5	17.0	15.0	19.5	17.5	17.5	15.0	15.0	13.5
28	11.5	9.0	17.5	15.0	17.0	15.0	19.5	17.5	17.0	14.5	15.0	13.5
29	11.5	9.0	17.5	15.5	17.0	15.0	19.5	17.0	17.5	15.0	14.5	13.0
30	12.0	9.5	18.0	15.5	17.0	15.0	18.5	16.0	17.5	15.5	14.5	13.5
31	---	---	18.0	16.5	---	---	18.5	15.5	17.5	15.5	---	---
MONTH	12.0	6.0	18.0	9.0	19.5	13.0	19.5	14.5	19.5	14.5	18.0	13.0

11374000 COW CREEK NEAR MILLVILLE, CALIF.

LOCATION.--Lat 40°30'19", long 122°13'56", in NE¼NW¼ sec.32, T.31 N., R.3 W., Shasta County, on right bank 2.9 mi (4.7 km) upstream from mouth, 4.2 mi (6.8 km) southwest of Millville, and 4.3 mi (6.9 km) downstream from Little Cow Creek.

DRAINAGE AREA.--425 mi² (1,100 km²).

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 408.3 ft (124.44 m) above mean sea level.

AVERAGE DISCHARGE.--26 years, 707 ft³/s (20.02 m³/s), 512,200 acre-ft/yr (632 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 23,200 ft³/s (657 m³/s) Feb. 13 (gage height, 14.51 ft or 4.423 m); minimum daily, 45 ft³/s (1.27 m³/s) Aug. 14.

Period of record: Maximum discharge, 45,200 ft³/s (1,280 m³/s) Dec. 27, 1951 (gage height, 21.55 ft or 6.568 m); minimum daily, 0.80 ft³/s (0.023 m³/s) Aug. 13, 1966.

Flood of 1937 or 1940 reached a stage of 23.8 ft (7.25 m), from floodmarks. Probable backwater effect from high flows on the Sacramento River.

REMARKS.--Records good. Numerous small diversions above station for irrigation.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	234	155	213	1360	481	820	727	558	153	62	72
2	77	171	169	200	2540	529	741	714	535	137	68	70
3	83	157	1310	190	1180	490	834	884	523	120	64	68
4	76	154	1960	189	1350	461	1060	893	492	126	53	64
5	69	151	444	195	986	444	1700	744	478	132	55	55
6	74	151	289	1220	1450	549	1470	668	469	125	57	53
7	74	174	238	2070	4330	1250	1240	648	461	118	54	49
8	71	283	214	3910	4200	1500	1390	666	410	113	56	51
9	83	191	196	863	4650	1380	1150	695	370	100	59	53
10	87	170	186	509	2300	1210	998	716	350	87	58	56
11	84	164	179	381	1710	949	894	745	338	80	50	61
12	77	160	188	311	8490	754	809	765	313	78	47	60
13	73	157	241	273	11800	955	757	810	298	74	46	60
14	78	156	201	250	3180	924	1010	851	287	74	45	58
15	78	154	199	233	1790	729	1210	886	266	96	50	62
16	79	151	189	220	1260	1100	867	841	253	156	52	59
17	77	151	182	209	956	2100	741	827	233	127	55	54
18	76	171	177	202	792	8860	667	827	226	108	129	55
19	84	172	171	197	2920	10800	1100	826	222	102	165	58
20	86	161	168	192	2330	3130	848	752	217	96	120	62
21	85	167	168	184	1230	3800	739	643	210	84	96	57
22	87	209	172	178	902	3980	705	592	198	83	81	58
23	85	176	161	175	747	2250	819	568	191	75	76	59
24	93	163	156	172	652	4740	1220	570	195	74	64	57
25	96	180	156	171	584	8920	1640	553	226	67	55	54
26	98	191	154	173	528	2950	1190	531	208	65	50	54
27	113	171	1480	174	497	1980	989	521	194	56	55	56
28	270	163	1200	163	479	1480	878	527	183	60	89	51
29	253	160	399	158	---	1200	800	539	173	59	96	53
30	180	157	287	153	---	1050	759	546	163	63	80	50
31	273	---	239	172	---	937	---	549	---	67	72	---
TOTAL	3196	5168	11628	13900	65193	71082	30037	21624	9240	2963	2154	1720
MEAN	103	172	375	448	2328	2319	1001	698	308	95.6	69.5	57.6
MAX	273	283	1960	3910	11800	10800	1700	893	558	156	165	72
MIN	69	151	154	153	479	444	667	521	163	56	45	49
AC-FT	6340	10250	23060	27570	129300	142600	59580	42890	18330	5880	4270	3430

CAL YR 1974 TOTAL 366907 MEAN 1005 MAX 22900 MIN 51 AC-FT 727800
WTR YR 1975 TOTAL 238714 MEAN 654 MAX 11800 MIN 45 AC-FT 473500

Peak discharge (base, 10,000 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-13	0900	14.51	23,200	3-24	2345	11.92	15,200
3-19	0745	12.95	18,200				

11374000 COW CREEK NEAR MILLVILLE, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1966.
Water temperatures: October 1965 to September 1971, October 1972 to current year.
EXTREMES.--Current year:
Water temperatures: Maximum, 32.5°C July 23, 24; minimum recorded, 3.0°C Dec. 23, 24.
Period of record:
Water temperatures: Maximum (1966-67, 1968-71, 1972 to current year), 33.0°C June 27, 1973, Aug. 2, 1974; minimum, freezing point Dec. 14, 15, 1967, Jan. 10, 11, 1968.
REMARKS.--Prior to Sept. 14, 1973, at gaging station 2.6 mi (4.2 km) downstream. Temperature probe buried in streambed Jan. 7 to Apr. 28, and out of water June 14 to July 11.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.5	17.0	14.0	11.0	8.5	6.5	7.5	5.0				
2	22.0	17.5	13.5	10.0	9.0	8.5	7.0	4.5				
3	22.5	18.5	14.0	11.0	10.5	8.5	6.5	5.0				
4	21.0	18.0	13.5	11.0	15.0	10.0	6.5	5.0				
5	19.0	15.5	14.0	11.0	10.0	8.5	6.0	5.0				
6	18.5	13.5	13.5	11.5	11.5	9.0	5.5	5.0				
7	20.0	14.0	13.0	11.5	11.0	8.5	---	---				
8	17.5	15.5	12.0	9.5	10.0	7.5	---	---				
9	19.0	14.5	13.0	8.5	9.5	7.5	---	---				
10	20.0	15.0	13.5	10.0	8.5	7.0	---	---				
11	19.5	15.5	13.0	10.5	9.0	7.5	---	---				
12	19.5	15.0	13.0	10.5	8.5	8.0	---	---				
13	19.5	14.5	13.5	10.5	9.0	7.5	---	---				
14	19.5	14.5	14.0	11.5	9.0	8.5	---	---				
15	19.5	14.5	14.0	11.5	10.0	7.5	---	---				
16	19.5	14.5	13.5	12.0	9.0	7.5	---	---				
17	18.5	14.5	12.5	11.5	9.0	7.0	---	---				
18	19.0	14.0	13.0	11.5	8.0	6.0	---	---				
19	18.0	14.5	12.0	9.5	7.0	5.0	---	---				
20	18.0	13.5	11.0	9.5	7.0	6.0	---	---				
21	16.0	12.5	12.5	10.5	7.0	5.5	---	---				
22	16.5	12.5	10.5	8.5	6.0	4.0	---	---				
23	15.5	12.0	10.5	7.5	5.0	3.0	---	---				
24	15.5	12.0	10.0	7.5	5.0	3.0	---	---				
25	16.0	12.5	11.5	9.5	6.0	3.5	---	---				
26	16.0	13.5	10.0	7.5	5.5	4.0	---	---				
27	15.0	14.0	10.5	8.0	6.0	5.5	---	---				
28	16.0	13.5	10.0	8.0	6.5	5.0	---	---				
29	15.0	11.5	9.0	7.0	6.0	4.0	---	---				
30	13.0	11.5	9.0	7.0	7.0	5.5	---	---				
31	13.0	12.0	---	---	6.5	4.5	---	---				
MONTH	22.5	11.5	14.0	7.0	15.0	3.0	---	---				

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	19.0	11.5	23.5	19.0	---	---	29.0	21.0	26.5	20.5
2	---	---	18.5	12.0	24.5	18.0	---	---	30.0	22.0	26.5	20.0
3	---	---	16.5	12.5	24.5	18.0	---	---	30.5	22.5	27.0	19.5
4	---	---	15.5	9.5	26.0	19.0	---	---	30.0	23.5	28.0	20.0
5	---	---	15.5	8.5	27.0	20.5	---	---	30.0	22.5	28.5	21.0
6	---	---	17.5	9.5	26.5	21.0	---	---	28.5	22.5	28.5	21.5
7	---	---	18.5	10.5	26.0	20.0	---	---	27.5	21.0	28.5	21.5
8	---	---	20.0	12.0	23.0	18.0	---	---	29.0	21.0	28.5	22.0
9	---	---	20.0	13.5	24.0	16.5	---	---	29.5	22.5	25.5	22.0
10	---	---	18.0	13.0	25.0	16.0	---	---	30.0	22.0	24.5	21.5
11	---	---	20.5	12.5	25.5	16.5	---	---	30.0	22.5	27.5	20.5
12	---	---	21.0	13.5	26.5	17.0	31.0	24.5	29.5	22.5	28.0	21.5
13	---	---	22.0	13.5	26.5	18.0	32.0	25.0	29.5	23.0	28.0	22.5
14	---	---	21.5	14.5	---	---	29.5	24.5	29.0	22.5	28.0	21.5
15	---	---	20.0	14.5	---	---	24.5	21.5	29.0	22.5	27.0	21.0
16	---	---	21.0	12.5	---	---	27.5	20.0	29.0	22.5	26.5	20.5
17	---	---	22.5	14.0	---	---	29.0	24.5	25.0	21.5	26.5	20.5
18	---	---	23.0	15.0	---	---	29.5	24.0	24.5	19.5	26.5	20.5
19	---	---	21.0	15.5	---	---	30.0	23.5	26.0	19.5	26.5	20.0
20	---	---	18.5	11.5	---	---	30.5	23.5	27.0	21.0	27.5	20.5
21	---	---	19.0	11.5	---	---	31.0	24.0	27.5	22.0	27.0	20.5
22	---	---	21.0	13.0	---	---	31.5	24.5	28.5	22.0	26.0	20.0
23	---	---	22.5	14.5	---	---	32.5	25.5	28.5	23.0	26.0	19.5
24	---	---	22.0	16.5	---	---	32.5	26.0	29.0	22.0	26.0	19.5
25	---	---	22.0	14.0	---	---	32.0	25.0	29.5	23.0	25.5	19.5
26	---	---	23.5	16.0	---	---	32.0	24.5	29.0	23.5	25.0	19.0
27	---	---	24.0	17.0	---	---	32.0	25.0	24.0	21.0	24.0	18.5
28	---	---	25.0	17.5	---	---	30.5	24.5	25.0	17.5	24.5	18.0
29	17.0	10.0	25.5	18.0	---	---	29.0	23.5	26.0	19.5	24.0	17.5
30	18.0	10.5	27.0	18.5	---	---	27.5	21.0	26.0	19.5	24.0	18.5
31	---	---	27.0	19.5	---	---	27.5	21.0	26.0	19.5	---	---
MONTH	---	---	27.0	8.5	---	---	---	---	30.5	17.5	28.5	17.5

11374400 MIDDLE FORK COTTONWOOD CREEK NEAR ONO, CALIF.

LOCATION.--Lat 40°22'03", long 122°34'19", in SW¼NW¼ sec.17, T.29 N., R.6 W., Shasta County, on right bank 700 ft (210 m) downstream from Poverty Gulch, 4.6 mi (7.4 km) upstream from North Fork Cottonwood Creek, and 7.8 mi (12.6 km) southeast of Ono.

DRAINAGE AREA.--244 mi² (632 km²).

PERIOD OF RECORD.--October 1956 to September 1975 (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 610 ft (186 m), from topographic map. Prior to Nov. 1, 1969, at site 4.2 mi (6.8 km) downstream at different datum.

AVERAGE DISCHARGE.--19 years, 270 ft³/s (7.646 m³/s), 195,600 acre-ft/yr (241 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,160 ft³/s (231 m³/s) Mar. 7 (gage height, 5.85 ft or 1.783 m); minimum daily, 12 ft³/s (0.34 m³/s) Oct. 20-23.

Period of record: Maximum discharge, 22,700 ft³/s (643 m³/s) Jan. 16, 1974 (gage height, 12.70 ft or 3.871 m), from rating curve extended above 6,600 ft³/s (185 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 1.2 ft³/s (0.034 m³/s) Aug. 28, 1964.

REMARKS.--Records fair. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	27	27	49	103	580	1200	457	225	70	26	22
2	15	25	51	49	177	687	1040	475	225	68	25	21
3	15	24	214	47	148	600	898	484	212	65	24	20
4	14	24	223	54	298	512	814	466	198	65	24	20
5	14	24	109	71	270	449	761	415	189	65	23	20
6	14	24	76	354	300	475	665	375	189	63	23	19
7	14	24	61	316	630	4290	611	360	180	60	22	18
8	14	27	54	497	780	3370	590	368	170	58	23	18
9	15	27	49	333	1150	2120	530	407	156	58	22	17
10	16	26	45	236	962	2120	493	415	143	56	22	18
11	16	25	45	189	606	1510	475	399	135	56	22	18
12	16	24	43	158	3530	1120	475	391	139	56	22	18
13	15	24	56	137	4020	912	493	407	139	53	21	18
14	14	24	56	127	1570	735	540	449	135	51	21	18
15	14	24	59	121	912	865	540	449	131	60	21	18
16	14	24	61	118	643	698	484	391	120	68	21	18
17	14	24	54	112	493	1660	449	353	113	65	21	18
18	13	26	49	112	407	3340	423	338	110	60	24	18
19	13	32	45	112	512	3640	407	338	103	56	28	17
20	12	27	45	106	774	2460	415	309	100	51	27	16
21	12	27	43	100	550	2490	415	280	94	46	26	16
22	12	27	45	95	457	2460	432	264	91	42	24	16
23	12	28	41	86	407	2080	449	252	89	40	24	15
24	13	27	32	84	383	2340	590	247	89	36	23	15
25	14	28	34	81	383	4090	814	242	91	30	22	15
26	14	39	36	78	399	2810	643	225	86	27	22	14
27	16	32	95	76	415	2170	550	220	76	27	22	14
28	79	28	165	68	512	1650	502	220	76	27	22	14
29	56	27	76	66	---	1260	475	212	73	27	24	14
30	28	27	63	61	---	1250	457	212	70	26	24	14
31	27	---	54	71	---	1370	---	220	---	26	22	---
TOTAL	569	796	2106	4164	21791	55913	17630	10640	3955	1558	717	517
MEAN	18.4	26.5	67.9	134	778	1804	588	343	132	50.3	23.1	17.2
MAX	79	39	223	497	4020	4290	1200	484	225	70	28	22
MIN	12	24	27	47	103	449	407	212	70	26	21	14
AC-FT	1130	1580	4180	8260	43220	110900	34970	21100	7840	3090	1420	1030

CAL YR 1974 TOTAL 142910 MEAN 392 MAX 16100 MIN 12 AC-FT 283500
WTR YR 1975 TOTAL 120356 MEAN 330 MAX 4290 MIN 12 AC-FT 238700

Peak discharge (base, 1,800 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-12	1400	5.63	6,400	3-21	1400	4.15	3,940
3-7	1100	5.85	8,160	3-25	0600	4.65	5,410
3-19	0130	4.45	4,830				

11375700 NORTH FORK COTTONWOOD CREEK NEAR IGO, CALIF.

LOCATION.--Lat 40°26'32", long 122°32'57", in SE¼NW¼ sec.21, T.30 N., R.6 W., Shasta County, near right bank on downstream side of bridge on Gas Point Road, 1.2 mi (1.9 km) downstream from Huling Creek, 4.4 mi (7.1 km) south of Igo, and 4.5 mi (7.2 km) upstream from Middle Fork.

DRAINAGE AREA.--88.7 mi² (229.7 km²).

PERIOD OF RECORD.--October 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 630 ft (192 m), from topographic map.

AVERAGE DISCHARGE.--19 years, 178 ft³/s (5.041 m³/s), 129,000 acre-ft/yr (159 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,810 ft³/s (108 m³/s) Feb. 12 (gage height, 34.86 ft or 10.625 m); minimum daily, 4.0 ft³/s (0.11 m³/s) Sept. 7, 8.

Period of record: Maximum discharge, 11,000 ft³/s (312 m³/s) Dec. 22, 1964 (gage height, 39.45 ft or 12.024 m in gage well, 41.7 ft or 12.71 m, from floodmarks), from rating curve extended above 4,400 ft³/s (125 m³/s) on basis of slope-area measurement of maximum flow; minimum daily, 0.80 ft³/s (0.023 m³/s) July 23-25, 1968, Aug. 27-29, Sept. 1, 1972.

Flood of Dec. 21, 1955, reached a peak discharge of 14,300 ft³/s (405 m³/s) by slope-area measurement at site 1.2 mi (1.9 km) upstream (above Huling Creek) adjusted for intervening drainage area.

REMARKS.--Some storage for irrigation above station in Rainbow Lake, capacity, 4,800 acre-ft (5.92 hm³). Some flow diverted upstream to Clear Creek basin by Happy Valley Irrigation Canal.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WRD Calif. 1966: 1960(M), 1961(M), 1963(M), 1964(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	30	25	56	140	157	576	333	95	30	19	7.7
2	9.9	30	74	52	145	270	549	329	93	30	18	7.6
3	10	30	482	48	150	215	528	330	89	30	17	6.9
4	11	30	217	50	150	188	503	316	85	29	16	4.8
5	11	30	90	65	180	178	502	300	83	30	16	4.7
6	11	30	72	191	293	221	438	285	84	30	15	4.3
7	11	34	62	171	808	1890	435	278	82	29	15	4.0
8	12	35	57	250	904	1700	433	274	77	29	14	4.0
9	12	31	57	153	790	1050	371	270	75	26	12	4.4
10	12	30	56	125	654	1310	333	270	71	31	10	5.8
11	12	29	56	108	309	863	319	258	69	32	8.8	5.4
12	12	26	60	98	2370	635	315	248	68	31	7.4	5.1
13	11	23	59	92	1090	558	322	246	64	31	7.1	4.9
14	11	23	63	90	712	468	369	247	64	31	6.8	5.2
15	11	24	65	88	504	471	325	244	64	39	6.5	5.0
16	11	25	66	83	408	452	306	237	62	38	6.6	7.0
17	12	25	65	80	338	1390	289	218	59	34	7.1	6.6
18	12	32	64	80	293	2300	278	196	50	32	12	6.7
19	12	28	57	77	325	1460	274	167	38	30	11	7.0
20	12	27	43	76	262	922	266	161	36	30	9.9	11
21	11	34	44	73	211	1200	266	151	35	29	8.4	13
22	11	40	44	70	177	1120	269	144	33	29	8.3	13
23	11	30	43	66	156	945	313	139	32	28	7.9	15
24	12	29	42	63	147	1300	510	129	34	27	7.9	22
25	13	32	41	63	144	1640	476	122	35	25	7.5	28
26	13	35	41	61	137	1020	418	117	34	23	7.1	28
27	20	33	178	59	132	828	384	110	32	22	7.9	28
28	101	31	121	57	131	719	361	104	31	22	9.4	11
29	31	30	66	57	---	634	345	100	30	22	8.3	8.4
30	23	25	57	56	---	623	337	100	31	21	8.1	7.4
31	33	---	54	63	---	621	---	97	---	19	7.8	---
TOTAL	504.9	889	2521	2719	12066	27330	11388	6520	1733	889	323.8	290.9
MEAN	16.3	29.6	81.3	87.7	431	882	380	210	57.8	28.7	10.4	9.70
MAX	101	40	482	250	2370	2300	576	333	95	39	19	28
MIN	9.9	23	25	48	131	157	266	97	30	19	6.5	4.0
AC-FT	1000	1760	5000	5390	23930	54210	22590	12930	3440	1760	642	577

CAL YR 1974 TOTAL 94920.3 MEAN 260 MAX 7560 MIN 9.3 AC-FT 188300
WTR YR 1975 TOTAL 67172.6 MEAN 184 MAX 2370 MIN 4.0 AC-FT 133200

11375810 COTTONWOOD CREEK NEAR OLINDA, CALIF.

LOCATION.--Lat 40°23'06", long 122°28'31", in SE¼NW¼ sec.7, T.29 N., R.5 W., Shasta County, on left bank 1.0 mi (1.6 km) downstream from Dutch Gulch, and 5.5 mi (8.8 km) southwest of Olinda.

DRAINAGE AREA.--395 mi² (1,023 km²).

PERIOD OF RECORD.--August 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 515 ft (157 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 13,200 ft³/s (374 m³/s) Feb. 12 (gage height, 15.59 ft or 4.752 m); minimum daily, 14 ft³/s (0.40 m³/s) Sept. 16.
Period of record: Maximum discharge, 36,900 ft³/s (1,050 m³/s) Jan. 16, 1974 (gage height, 21.44 ft or 6.535 m); no flow Aug. 30, Sept. 7, 8, 1972.

REMARKS.--Records good. Numerous pumping diversions above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	69	62	112	229	1640	1680	836	342	98	38	24
2	17	62	106	104	431	1330	1520	839	363	96	35	22
3	19	59	619	98	296	1190	1410	851	314	94	33	21
4	18	57	540	105	549	1040	1310	826	293	90	31	20
5	18	57	235	120	515	940	1310	756	289	90	31	19
6	20	57	171	555	628	989	1140	709	287	87	29	19
7	21	59	146	476	1700	6400	1060	688	272	86	27	20
8	20	70	129	804	1620	4570	1090	696	257	85	26	18
9	23	66	119	512	2040	2770	945	725	242	73	27	15
10	25	59	112	355	1930	3290	875	733	231	76	28	18
11	24	57	109	284	1120	2410	850	719	223	81	24	18
12	22	53	108	239	6030	1990	842	688	219	80	22	18
13	21	49	120	212	6970	1840	869	688	210	78	20	18
14	21	48	123	200	2750	1580	947	717	205	77	19	17
15	21	48	127	198	1820	1480	917	718	200	92	18	15
16	21	50	129	180	1430	1620	896	666	193	108	18	14
17	20	50	123	172	1200	3600	799	617	180	93	19	17
18	21	60	116	168	1060	6740	760	588	172	85	31	17
19	21	65	110	167	1330	5440	767	569	142	77	45	18
20	23	59	92	162	1500	3730	744	510	140	74	39	20
21	21	61	89	155	1170	4520	747	465	133	69	31	23
22	19	77	90	148	986	3610	762	430	125	62	26	25
23	20	67	88	141	872	2850	816	408	118	56	23	21
24	24	62	81	134	815	3770	1080	396	121	49	21	25
25	26	66	83	130	819	5850	1320	389	123	51	24	36
26	28	77	80	129	838	3570	1060	371	117	47	22	38
27	31	73	208	126	842	2730	951	360	108	45	23	35
28	151	70	377	123	955	2170	898	350	103	40	30	28
29	113	68	167	120	---	1820	856	331	100	41	34	17
30	66	64	133	113	---	1740	844	330	97	42	33	16
31	70	---	120	120	---	1830	---	337	---	40	27	---
TOTAL	985	1839	4912	6662	43303	88649	29997	18286	5919	2261	854	632
MEAN	31.8	61.3	158	215	1547	2860	1000	590	197	72.9	27.5	21.1
MAX	151	77	619	804	6970	6740	1680	851	363	108	45	38
MIN	17	48	62	98	229	940	744	330	97	40	18	14
AC-FT	1950	3650	9740	13210	85890	175800	59500	36270	11700	4480	1690	1250

CAL YR 1974 TOTAL 257437 MEAN 705 MAX 23400 MIN 16 AC-FT 510600
WTR YR 1975 TOTAL 204079 MEAN 559 MAX 6970 MIN 14 AC-FT 404800

Peak discharge (base, 3,000 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-9	0015	12.13	8,800	3-17	2200	13.92	10,100
2-12	1530	15.59	13,200	3-21	1500	12.88	8,570
3-7	1245	15.46	12,900	3-25	0545	12.63	8,110
3-10	0815	10.54	4,470				

11375810 COTTONWOOD CREEK NEAR OLINDA, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water year 1971 (partial-record station).
Water temperatures: February 1973 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 30.5°C Aug. 24, 25; minimum, 3.0°C Jan. 11.
Period of record:
Water temperatures: Maximum, 30.5°C Aug. 24, 25, 1975; minimum, 3.0°C Nov. 29, 1975, Jan. 11, 1975.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.0	21.0	15.0	14.0	8.5	7.0	5.5	5.0	6.5	5.5	9.5	8.5
2	21.5	21.0	14.0	13.5	8.5	7.5	5.0	4.5	6.5	6.0	9.5	8.5
3	21.5	21.0	14.0	13.0	9.0	7.5	4.5	4.0	7.0	6.0	9.5	9.0
4	21.5	21.0	14.0	13.0	9.5	9.0	4.5	4.0	7.0	6.0	9.5	9.0
5	21.0	20.0	14.0	12.5	10.0	9.0	4.5	4.0	7.0	6.0	10.0	9.0
6	20.5	19.0	13.5	12.5	10.0	10.0	6.0	4.0	6.5	6.0	10.0	9.0
7	20.0	19.0	13.5	13.0	10.0	9.5	6.0	5.5	7.5	6.0	10.5	9.5
8	20.0	19.0	13.0	12.0	9.5	8.5	6.0	4.5	8.0	7.0	11.0	10.0
9	20.0	19.0	12.5	12.0	9.0	8.0	4.5	3.5	8.0	7.0	11.0	9.5
10	20.0	18.5	12.5	11.5	8.5	7.5	4.0	3.5	8.0	7.0	11.0	9.0
11	20.0	19.0	12.5	11.5	8.5	7.5	4.0	3.0	8.5	7.5	11.5	9.5
12	19.5	18.5	12.5	11.5	8.5	7.5	5.5	4.0	8.5	7.0	11.0	9.5
13	19.5	18.0	13.0	11.5	8.5	7.5	5.5	5.0	8.5	7.0	10.5	9.5
14	19.5	18.5	13.0	12.0	8.0	7.5	5.5	5.0	7.0	5.5	10.5	9.0
15	19.5	18.5	13.0	12.0	8.5	7.5	5.0	4.5	6.0	4.5	10.5	9.0
16	19.5	18.5	13.0	12.0	8.0	7.0	5.0	4.5	6.0	5.0	9.5	8.0
17	19.0	18.0	12.5	11.5	8.0	7.0	4.5	4.0	6.0	5.5	9.5	7.5
18	19.0	18.0	13.0	12.0	7.5	6.5	5.0	4.5	6.5	5.5	9.0	7.5
19	19.5	18.5	12.5	11.0	7.0	6.0	5.5	5.0	6.5	5.5	9.5	8.5
20	19.0	17.5	11.5	11.0	6.5	6.0	6.0	5.0	7.0	5.5	9.0	7.0
21	18.5	17.5	11.5	11.0	6.5	6.0	6.0	5.5	7.0	6.0	9.0	8.0
22	18.5	17.0	11.0	10.0	6.5	5.5	6.5	5.5	6.5	6.0	8.5	6.5
23	18.0	17.0	10.0	9.0	5.5	5.0	6.5	6.5	7.0	6.5	8.5	7.0
24	17.5	16.5	10.0	9.0	5.0	4.0	7.0	6.5	7.5	6.5	8.5	7.5
25	17.5	16.5	10.0	9.0	5.0	4.0	7.0	6.5	8.0	7.5	---	---
26	17.5	17.0	10.0	8.0	5.0	4.5	7.5	6.5	8.0	7.5	---	---
27	18.0	17.0	9.5	8.5	6.5	4.5	7.5	6.5	9.0	8.0	---	---
28	17.5	16.5	9.0	8.5	6.5	5.5	7.5	6.5	9.0	8.5	---	---
29	16.5	15.0	9.0	7.5	6.5	6.0	7.0	6.5	---	---	---	---
30	16.0	14.5	8.5	7.5	6.5	5.5	7.0	6.0	---	---	---	---
31	15.0	14.5	---	---	6.5	5.0	6.5	6.0	---	---	---	---
MONTH	22.0	14.5	15.0	7.5	10.0	4.0	7.5	3.0	9.0	4.5	---	---

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	14.5	12.5	21.0	20.5	22.5	22.0	27.5	27.0	27.5	21.0
2	---	---	15.0	13.0	20.5	20.0	23.0	22.5	27.5	27.0	27.5	20.0
3	---	---	15.0	13.5	21.0	20.0	23.0	22.5	27.5	27.0	28.0	20.0
4	---	---	14.0	11.0	21.0	20.0	23.5	23.0	28.0	27.5	28.5	20.5
5	---	---	13.5	11.0	21.5	20.5	23.5	23.0	28.0	27.5	29.0	21.5
6	---	---	14.5	11.5	22.5	21.5	24.0	23.5	28.0	27.5	28.5	21.5
7	---	---	15.5	13.0	22.0	21.5	24.5	24.0	27.5	26.5	28.5	21.5
8	---	---	16.0	14.0	21.0	20.0	25.0	24.5	27.0	26.5	28.5	22.0
9	---	---	16.0	14.5	20.0	19.0	26.0	25.0	27.5	27.0	25.5	22.5
10	---	---	15.5	14.0	20.0	19.5	26.0	25.5	27.5	27.0	24.0	21.0
11	---	---	15.5	13.5	20.5	20.0	26.0	25.5	27.5	27.0	28.5	21.5
12	---	---	17.0	15.5	21.0	20.5	26.5	26.0	27.5	27.0	28.5	22.5
13	---	---	17.5	16.5	21.5	21.0	26.5	26.5	27.5	27.0	29.0	23.0
14	---	---	18.0	16.5	22.0	21.5	26.5	26.5	27.5	27.0	28.5	22.5
15	9.0	8.0	18.0	17.0	22.5	22.0	26.5	25.5	27.5	27.0	28.0	21.5
16	10.5	9.0	18.0	16.5	23.0	22.0	26.5	25.5	27.0	26.5	28.0	21.0
17	11.5	9.0	18.5	17.0	22.5	21.5	27.5	26.5	26.5	25.5	27.5	21.0
18	11.5	10.5	19.0	18.0	22.0	21.0	27.5	27.0	27.0	24.5	27.5	21.5
19	13.0	11.0	18.5	17.5	21.5	21.0	27.5	27.0	29.0	22.0	27.5	21.5
20	13.5	11.5	18.0	16.0	21.5	21.0	28.0	27.5	29.5	21.5	28.5	22.0
21	13.5	12.0	17.5	16.5	22.0	21.0	28.0	27.5	29.0	22.5	27.5	22.0
22	13.5	12.0	17.5	17.0	22.0	21.5	28.5	27.5	30.0	22.0	27.0	21.0
23	13.0	11.0	18.5	17.5	22.5	22.0	28.5	28.0	30.0	22.5	27.5	21.0
24	11.5	10.5	19.0	17.5	22.0	21.0	28.5	28.0	30.5	22.5	27.0	21.0
25	11.5	10.0	19.0	18.0	21.5	21.0	29.0	28.0	30.5	23.0	27.0	21.0
26	11.5	10.0	19.5	18.0	21.5	21.0	28.5	28.0	29.5	23.5	26.5	20.5
27	13.0	10.5	20.0	19.0	22.0	21.5	28.5	28.0	25.0	21.5	25.0	20.0
28	13.5	11.0	20.0	19.5	22.0	21.5	28.5	28.0	26.5	19.5	26.0	19.5
29	16.0	11.0	20.5	19.5	22.5	22.0	28.5	28.0	27.5	20.0	26.0	19.0
30	16.5	12.0	20.5	20.0	22.5	22.0	28.0	27.5	27.5	20.5	26.0	19.5
31	---	---	21.0	20.5	---	---	27.5	27.0	27.5	20.5	---	---
MONTH	---	---	21.0	11.0	23.0	19.0	29.0	22.0	30.5	19.5	29.0	19.0

11375820 SOUTH FORK COTTONWOOD CREEK NEAR COTTONWOOD, CALIF.

LOCATION.--Lat 40°18'59", long 122°26'52", in SW¼SE¼ sec.32, T.29 N., R.5 W., Tehama County, on right bank 15 ft (5 m) downstream from highway bridge, 0.7 mi (1.1 km) upstream from Dry Fork, and 10.3 mi (16.6 km) southwest of Cottonwood.

DRAINAGE AREA.--217 mi² (562 km²).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 525 ft (160 m), from topographic map. October 1962 to Dec. 22, 1964, at site 85 ft (26 m) upstream at different datum.

AVERAGE DISCHARGE.--13 years, 242 ft³/s (6.853 m³/s), 175,300 acre-ft/yr (216 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,950 ft³/s (225 m³/s) Mar. 7 (gage height, 9.16 ft or 2.792 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Oct. 1.

Period of record: Maximum discharge, 18,700 ft³/s (530 m³/s) Jan. 16, 1974 (gage height, 14.05 ft or 4.282 m); no flow many days in most years.

REMARKS.--Small diversion above station.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	22	15	42	102	621	756	371	434	76	18	7.4
2	1.7	21	21	41	123	756	657	413	481	75	16	6.9
3	1.7	18	115	38	102	630	590	454	351	74	15	6.6
4	1.9	16	168	40	128	487	539	439	295	73	14	6.2
5	1.9	16	61	65	107	442	499	403	288	72	12	5.5
6	2.0	17	63	251	123	441	452	334	293	70	12	4.8
7	1.9	20	48	320	329	3270	423	322	271	68	11	4.3
8	2.3	21	37	390	592	2290	487	384	253	67	10	3.8
9	3.1	24	29	276	1670	1450	331	453	223	65	9.9	3.4
10	3.1	23	26	168	871	1220	290	494	203	63	9.7	3.2
11	3.1	22	24	131	438	862	291	468	190	60	9.0	3.8
12	3.0	21	25	115	1460	650	290	428	177	57	8.5	4.1
13	3.0	19	35	109	3780	530	316	452	167	54	8.3	3.9
14	2.8	18	46	102	1820	438	482	582	162	52	8.2	3.8
15	2.5	19	38	99	1030	397	481	615	153	50	8.7	3.8
16	2.1	20	40	95	717	452	341	531	141	70	8.8	3.7
17	2.0	21	38	92	502	536	284	468	132	65	8.1	3.5
18	2.3	21	34	87	445	1540	261	483	124	57	11	3.5
19	2.2	22	31	83	505	2000	257	533	119	52	14	3.3
20	2.2	24	35	79	1160	1300	260	465	115	47	15	3.3
21	1.9	25	30	75	695	2050	276	390	109	43	13	3.2
22	1.7	26	29	71	471	1290	307	323	104	40	11	2.8
23	1.8	27	31	69	437	966	326	312	100	36	10	2.6
24	2.1	27	30	66	426	1220	458	368	95	33	9.9	2.6
25	2.7	26	31	62	435	2700	732	373	94	29	9.2	2.6
26	2.8	25	34	59	446	1820	518	327	90	26	8.2	2.3
27	4.0	24	42	56	446	1310	431	336	84	24	7.9	2.1
28	11	21	107	57	557	954	410	338	80	22	9.3	2.0
29	25	19	65	53	---	788	361	340	78	20	10	2.1
30	23	17	51	51	---	769	351	372	76	20	9.5	2.2
31	22	---	48	55	---	846	---	415	---	19	8.3	---
TOTAL	144.6	642	1422	3297	19917	35103	12216	12966	5422	1587	333.5	113.3
MEAN	4.66	21.4	45.9	106	711	1132	407	418	181	51.2	10.8	3.78
MAX	25	27	168	390	3780	3270	756	615	434	76	18	7.4
MIN	1.6	16	15	38	102	397	257	312	76	19	7.9	2.0
AC-FT	286	1270	2820	6540	39510	69630	24230	25720	10750	3150	661	225

CAL YR 1974 TOTAL 130805.1 MEAN 358 MAX 15000 MIN 1.6 AC-FT 259500
WTR YR 1975 TOTAL 93163.2 MEAN 255 MAX 3780 MIN 1.6 AC-FT 184800

11375970 COTTONWOOD CREEK AT COTTONWOOD, CALIF.

(Formerly published as 11376000 Cottonwood Creek near Cottonwood, Calif.)

LOCATION.--Lat 40°22'55", long 122°16'57", in SW¼SE¼ sec.11, T.29 N., R.4 W., Shasta County, at bridge on U.S. Highway 99 business route, 0.7 mi (1.1 km) south of Cottonwood.

DRAINAGE AREA.--836 mi² (2,165 km²).

PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), October 1953 to current year.

REMARKS.--Records furnished by California Department of Water Resources. Records of discharge given for Cottonwood Creek near Cottonwood (sta 11376000).

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)
OCT.							
11...	1115	76	225	7.6	16.5	1	10.0
NOV.							
14...	1000	96	286	7.5	12.0	1	10.2
DEC.							
05...	0830	525	337	7.6	8.0	19	11.0
JAN.							
15...	1000	368	273	7.7	5.0	2	12.6
FEB.							
06...	1320	1170	170	7.3	7.0	19	11.9
MAR.							
05...	0930	1570	209	7.6	9.0	20	10.2
APR.							
21...	0915	1220	225	7.9	13.0	2	10.5
MAY							
19...	0905	1220	171	7.8	17.0	17	9.2
JUNE							
17...	0830	462	196	7.8	21.0	2	8.2
JULY							
22...	0850	171	236	7.5	25.0	2	9.2
AUG.							
20...	0830	126	220	7.2	20.5	2	7.1
SEP.							
11...	0900	90	215	7.1	21.0	1	8.3

DATE	TIME	DIS-CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.									
11...	1115	76	--	--	--	7.3	--	118	0
FEB.									
06...	1320	1170	--	12	6.6	9.0	6.0	61	0
APR.									
21...	0915	1220	520	--	--	7.6	--	116	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
OCT.									
11...	97	--	6.6	--	--	--	--	--	--
FEB.									
06...	50	15	8.9	1.4	--	--	124	.17	392
APR.									
21...	95	--	6.2	.05	.10	.03	--	--	--

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.									
11...	97	0	.3	0	--	--	--	--	--
FEB.									
06...	57	7	.5	200	--	--	--	--	--
APR.									
21...	100	5	.3	0	0	0	0	20	10

11376000 COTTONWOOD CREEK NEAR COTTONWOOD, CALIF.

LOCATION.--Lat 40°23'14", long 122°14'15", in NE¼NE¼ sec.7, T.29 N., R.3 W., Shasta County, on left bank 2.2 mi (3.5 km) east of Cottonwood, and 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--927 mi² (2,401 km²).

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 364.0 ft (110.95 m) above mean sea level (levels by Corps of Engineers). Prior to July 26, 1963, at site 100 ft (30 m) downstream on right bank at datum 3.59 ft (1.094 m) higher. July 26, 1963, to Sept. 13, 1972, at site 350 ft (107 m) downstream on right bank. Sept. 21, 1967, to Jan. 14, 1968, supplementary gage at a site 1,550 ft (472 m) downstream on right bank at datum 2.35 ft (0.716 m) higher.

AVERAGE DISCHARGE.--35 years, 875 ft³/s (24.78 m³/s), 633,900 acre-ft/yr (782 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 30,600 ft³/s (867 m³/s) Mar. 7 (gage height, 15.88 ft or 4.840 m); minimum daily, 66 ft³/s (1.87 m³/s) Sept. 24.
Period of record: Maximum discharge, 70,000 ft³/s (1,980 m³/s) Jan. 16, 1974 (gage height, 20.15 ft or 6.142 m); minimum, 15 ft³/s (0.42 m³/s) for several days in September 1945.

REMARKS.--Records good. Small diversions for irrigation above station. At times during irrigation season, Cottonwood Creek receives water above station from Sacramento River by way of Anderson-Cottonwood Canal.

REVISIONS (WATER YEARS).--WSP 1345: 1943, 1944(M), 1946-47, 1949(M), 1951-52. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	130	104	226	475	1740	2860	1370	835	244	115	102
2	74	126	115	209	857	2050	2520	1390	829	245	115	92
3	70	116	623	192	598	1950	2290	1430	763	250	107	94
4	76	110	1190	184	909	1710	2130	1450	763	239	103	98
5	70	104	525	219	867	1570	2180	1360	707	230	100	90
6	68	102	336	713	1170	1610	2070	1240	711	227	85	92
7	72	109	268	1080	3240	13000	1870	1190	684	235	79	99
8	83	118	226	1360	3370	10100	1810	1200	645	224	79	101
9	88	118	202	1160	9370	5630	1670	1270	598	207	78	96
10	78	113	190	736	4130	6110	1570	1340	563	188	86	83
11	76	107	178	581	2250	4480	1510	1350	547	180	82	90
12	74	103	174	483	9890	3420	1450	1300	528	183	81	89
13	72	100	181	433	17800	3150	1460	1260	516	178	78	83
14	74	96	214	397	5710	2780	1870	1360	513	170	71	77
15	83	93	203	368	3580	2390	1740	1430	490	186	73	81
16	94	91	205	352	2620	2680	1520	1340	484	238	75	78
17	86	91	192	336	2240	3910	1380	1260	462	252	72	79
18	88	91	182	318	1910	12600	1770	1220	426	249	77	85
19	94	94	181	307	2000	9890	1240	1220	398	234	144	83
20	101	96	168	299	6960	9020	1210	1140	385	205	126	78
21	96	104	157	290	2240	8500	1220	1030	375	191	129	82
22	76	106	155	277	2040	8480	1250	941	348	171	118	85
23	72	112	154	261	1730	6820	1310	872	332	180	107	79
24	75	111	146	252	1500	7730	1500	806	336	152	99	66
25	109	110	130	242	1430	13300	2180	895	337	130	94	69
26	159	112	130	231	1460	7890	1870	892	328	129	99	83
27	113	117	199	223	1450	5630	1630	818	308	120	105	91
28	243	117	781	217	1620	4210	1670	817	284	121	107	101
29	254	116	416	207	---	3300	1390	810	275	117	109	100
30	163	108	304	203	---	2980	1390	850	253	114	107	98
31	147	---	259	220	---	2990	---	830	---	115	108	---
TOTAL	3048	3227	8495	12570	89196	167280	50790	35565	14973	5910	3066	2616
MEAN	98.3	108	274	406	3186	5396	1693	1147	499	191	98.9	87.2
MAX	254	130	1190	1360	17800	13300	2860	1450	835	252	144	102
MIN	68	91	104	184	475	1570	1210	806	253	114	71	66
AC-FT	6050	6400	16850	24930	176900	331800	100700	70540	29700	11720	6080	5190

CAL YR 1974 TOTAL 506809 MEAN 1389 MAX 54300 MIN 68 AC-FT 1005000
WTR YR 1975 TOTAL 396649 MEAN 1087 MAX 17800 MIN 66 AC-FT 786800

Peak discharge (base, 7,100 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-9	0230	13.93	21,600	3-18	0100	13.71	17,700
2-13	0745	15.06	25,600	3-21	2030	14.80	23,900
3-7	1030	15.88	30,600	3-25	0845	13.51	16,600
3-10	1130	11.25	8,610				

11376550 BATTLE CREEK BELOW COLEMAN FISH HATCHERY, NEAR COTTONWOOD, CALIF.

LOCATION.--Lat 40°23'54", long 122°08'43", in SW¼NE¼ sec.1, T.29 N., R.3 W., Shasta County, U.S. Fish and Wildlife service land, on right bank 3.7 mi (6.0 km) downstream from Spring Branch, 5.7 mi (9.2 km) upstream from mouth, and 7.0 mi (11.3 km) east of Cottonwood.

DRAINAGE AREA.--357 mi² (925 km²).

PERIOD OF RECORD.--October 1961 to current year. October 1940 to September 1961 at site 0.6 mi (1.0 km) upstream published as "near Cottonwood"; low-flow records not equivalent owing to Coleman Fish Hatchery diversion.

GAGE.--Water-stage recorder. Altitude of gage is 415 ft (126 m), from topographic map.

AVERAGE DISCHARGE.--14 years, 540 ft³/s (15.29 m³/s), 391,200 acre-ft/yr (482 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,240 ft³/s (148 m³/s) Feb. 13 (gage height, 7.08 ft or 2.158 m); minimum daily, 263 ft³/s (7.45 m³/s) Sept. 28.

Period of record: Maximum discharge, 24,300 ft³/s (688 m³/s) Jan. 24, 1970 (gage height, 14.75 ft or 4.496 m), from rating curve extended above 4,200 ft³/s (119 m³/s) on basis of slope-area measurement of peak flow; minimum since 1961, 52 ft³/s (1.47 m³/s) Aug. 8, 1962.

Maximum stage known, 15.8 ft (4.82 m) Dec. 11, 1937, from floodmarks at former site and datum (discharge, 35,000 ft³/s or 991 m³/s, by slope-area measurement).

REMARKS.--Records good. Flow regulated by four small powerplants, several small reservoirs, and Coleman Fish Hatchery. Coleman Fish Hatchery diverts, 50 ft³/s (1.42 m³/s) to 90 ft³/s (2.55 m³/s) which is returned above the station. Ten ft³/s (0.28 m³/s) diverted at times above station for irrigation. Maximum flows considered equivalent to former station Battle Creek near Cottonwood.

REVISIONS (WATER YEARS).--WRD Calif. 1965: 1963.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	361	465	419	380	1160	552	689	725	1030	492	361	301
2	365	424	437	380	1520	603	664	737	968	487	355	299
3	366	409	869	375	654	604	682	824	938	478	347	295
4	367	401	982	381	767	562	668	813	921	468	346	292
5	375	396	517	391	685	550	767	719	968	467	329	292
6	385	385	435	919	766	588	708	691	988	466	322	298
7	381	416	415	813	1310	1120	672	700	974	459	313	292
8	381	492	407	1050	1610	1140	941	737	890	459	311	284
9	391	417	398	587	1540	1110	761	768	835	452	310	281
10	385	405	398	496	1140	857	693	792	817	447	309	290
11	384	401	389	458	795	745	680	808	804	446	308	298
12	382	395	402	431	1510	661	671	855	792	442	307	297
13	380	388	443	420	2720	643	668	880	768	445	308	291
14	375	391	418	409	1510	625	734	957	747	437	307	285
15	370	393	415	401	973	590	707	1010	755	456	305	288
16	385	397	405	401	799	658	672	935	759	543	306	283
17	375	402	399	396	681	604	640	934	726	482	302	282
18	380	421	395	395	621	690	622	974	668	454	354	282
19	375	430	390	394	869	1160	682	1030	633	440	416	283
20	381	414	387	394	868	1050	657	949	607	432	370	279
21	383	419	388	392	648	1200	651	822	611	437	342	278
22	377	502	390	390	589	1140	646	793	597	423	339	278
23	378	454	376	386	562	842	671	816	585	417	332	271
24	390	442	368	384	542	1150	866	856	593	395	318	269
25	394	465	366	386	534	1680	1180	867	584	395	314	273
26	385	459	376	393	522	1200	878	829	544	376	304	269
27	393	441	759	402	521	962	778	852	532	375	307	266
28	489	432	748	378	538	826	749	876	517	377	309	263
29	483	423	436	373	---	769	732	909	505	374	309	265
30	431	418	402	374	---	743	730	944	499	378	305	264
31	518	---	393	467	---	734	---	992	---	368	303	---
TOTAL	12165	12697	14322	14196	26954	26358	21859	26394	22155	13567	10068	8488
MEAN	392	423	462	458	963	850	729	851	739	438	325	283
MAX	518	502	982	1050	2720	1680	1180	1030	1030	543	416	301
MIN	361	385	366	373	521	550	622	691	499	368	302	263
AC-FT	24130	25180	28410	28160	53460	52280	43360	52350	43940	26910	19970	16840

CAL YR 1974 TOTAL 274463 MEAN 752 MAX 10900 MIN 345 AC-FT 544400
WTR YR 1975 TOTAL 209223 MEAN 573 MAX 2720 MIN 263 AC-FT 415000

Peak discharge (base, 2,500 ft³/s).--Feb. 2 (0230) 2,990 ft³/s (5.17 ft); Feb. 13 (0745) 5,240 ft³/s (7.08 ft).

11376550 BATTLE CREEK BELOW COLEMAN FISH HATCHERY, NEAR COTTONWOOD, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1966.
Water temperatures: December 1965 to current year.
Sediment records: Water years 1962-70 (partial-record station).

EXTREMES.--Current year:
Water temperatures: Maximum, 23.0°C July 23, 24; minimum, 3.5°C Jan. 31, Feb. 1.
Period of record:
Water temperatures: Maximum, 23.0°C July 20, 1971, July 23, 24, 1975; minimum, 2.0°C Dec. 23, 24, 1968.

REMARKS.--Temperature record furnished by U.S. Fish and Wildlife Service.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	13.0	10.5	10.0	8.5	7.0	6.5	5.5	6.5	3.5	11.0	10.0
2	14.5	13.5	10.0	9.5	9.0	8.5	6.5	5.5	7.0	5.5	11.5	9.5
3	14.5	13.5	10.0	9.5	10.5	9.0	6.5	5.5	8.0	6.0	10.5	9.0
4	14.5	13.5	10.0	9.5	10.5	9.0	8.0	6.5	8.0	5.5	10.5	9.0
5	14.0	13.0	10.0	9.5	9.0	8.0	8.0	7.0	7.0	6.0	10.5	9.5
6	13.5	12.0	10.0	9.5	10.0	8.5	8.0	6.5	8.0	6.5	10.5	9.5
7	13.5	12.0	10.0	9.5	10.0	9.0	8.5	8.0	9.0	8.0	11.5	10.0
8	13.0	13.0	9.5	9.0	9.0	8.0	8.5	7.0	10.0	9.0	10.5	9.5
9	13.5	12.0	9.5	9.0	9.0	8.0	7.0	6.0	10.0	8.5	10.5	9.0
10	13.5	12.0	10.0	9.0	8.5	8.0	8.0	6.5	9.0	7.0	10.5	8.5
11	13.5	12.0	9.5	9.0	9.0	8.5	8.0	6.5	9.5	8.5	11.0	9.0
12	13.5	12.0	10.0	9.5	9.0	9.0	8.0	6.5	9.0	8.5	10.0	8.0
13	13.0	12.0	10.0	9.0	9.0	8.5	8.5	6.5	9.5	8.5	10.0	8.5
14	13.0	12.0	10.0	9.5	9.0	8.5	8.5	6.5	9.0	7.0	11.0	8.0
15	13.0	12.0	10.0	9.5	9.5	8.5	8.5	7.0	7.0	5.5	10.5	9.0
16	13.0	12.0	10.0	9.5	9.0	8.5	9.0	7.0	8.0	6.0	9.5	8.0
17	13.0	12.0	9.5	9.5	9.0	8.0	9.0	8.0	8.0	5.5	10.0	8.5
18	13.0	12.0	11.5	9.5	8.0	7.0	9.5	8.0	8.0	6.0	10.0	9.0
19	13.0	12.0	10.5	9.0	8.0	6.5	9.5	8.0	8.5	8.0	10.0	8.5
20	13.0	12.0	9.5	9.0	8.5	8.0	9.5	8.0	8.5	6.0	9.0	6.5
21	12.0	11.0	11.0	9.5	8.5	8.0	10.0	8.5	7.0	5.5	8.5	6.0
22	11.5	10.5	10.5	8.5	8.0	6.0	9.5	8.5	8.5	5.5	9.5	5.5
23	11.5	11.0	9.0	8.0	6.5	5.5	10.0	8.5	9.5	6.5	9.5	6.0
24	11.0	10.5	9.0	8.0	6.0	5.0	10.5	9.0	10.5	8.0	---	---
25	11.5	10.5	10.0	9.0	7.0	6.0	10.0	9.0	10.5	8.5	---	---
26	11.5	11.0	9.5	8.0	7.0	6.0	9.5	8.0	10.0	9.0	8.5	6.0
27	11.5	11.5	9.5	8.5	8.0	6.0	8.0	6.0	11.5	9.5	9.0	6.0
28	11.5	11.0	9.0	8.0	6.0	5.5	6.0	5.0	11.5	10.0	9.0	5.5
29	11.0	10.0	9.0	8.0	6.0	5.0	6.5	5.5	---	---	11.0	7.0
30	10.5	10.0	9.0	8.0	7.0	6.0	6.5	5.0	---	---	12.0	9.5
31	10.5	10.0	---	---	6.5	5.5	6.0	3.5	---	---	11.5	9.5
MONTH	14.5	10.0	11.5	8.0	10.5	5.0	10.5	3.5	11.5	3.5	12.0	5.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	8.0	14.5	11.0	16.0	14.0	17.0	14.0	19.5	16.0	18.0	14.5
2	10.0	8.5	14.5	11.5	16.0	14.0	18.0	14.0	20.5	16.5	17.0	14.5
3	10.0	9.0	14.0	10.5	16.5	14.0	18.0	14.5	20.5	16.5	18.0	14.5
4	10.0	8.0	11.5	8.0	17.0	14.5	18.5	15.0	20.5	17.0	18.0	15.0
5	9.5	7.0	13.0	8.5	18.0	15.5	19.5	15.5	19.5	16.5	18.5	15.5
6	10.0	7.0	14.0	9.5	18.0	15.5	20.0	16.0	19.0	16.5	19.0	15.5
7	9.0	8.0	14.5	10.5	17.0	15.5	20.5	16.0	18.5	15.5	18.5	15.5
8	10.0	7.0	15.5	11.5	17.0	14.5	21.0	16.5	19.0	15.5	18.5	15.5
9	11.5	8.0	15.0	12.0	18.0	14.5	20.5	17.0	19.5	16.0	17.0	15.5
10	12.0	9.5	14.0	12.0	18.0	14.5	21.0	17.0	19.5	16.5	17.0	15.5
11	13.0	9.5	15.5	11.5	18.5	15.0	21.5	18.0	19.5	16.5	18.0	15.0
12	13.5	10.0	15.5	12.0	18.5	15.0	21.0	18.0	19.5	16.5	18.5	15.5
13	13.0	10.5	16.0	13.0	19.0	15.5	21.5	18.5	19.5	16.5	18.5	16.0
14	12.0	9.5	15.5	14.0	20.0	16.0	21.0	18.5	19.0	16.5	18.0	15.5
15	11.0	8.5	14.5	12.0	20.0	16.5	20.0	16.5	19.0	16.0	17.0	15.0
16	10.5	8.0	15.5	12.0	18.5	16.5	20.5	15.5	19.0	16.0	17.0	15.0
17	11.5	7.0	16.0	13.5	17.0	15.0	21.0	17.0	18.5	15.5	17.0	14.5
18	12.0	9.0	16.5	14.0	15.5	13.5	20.5	17.0	18.0	15.0	17.0	14.5
19	14.0	11.0	14.5	13.0	15.5	13.5	21.0	18.0	18.0	15.0	17.0	15.0
20	14.0	10.0	13.0	10.5	16.5	13.5	21.0	18.0	19.0	15.0	18.0	15.0
21	14.5	11.0	14.0	10.0	17.0	14.5	22.0	18.0	18.5	16.0	17.0	15.0
22	13.5	11.0	14.5	11.5	17.0	15.0	22.0	18.0	19.0	15.5	16.5	14.5
23	11.5	10.0	16.5	13.0	18.0	15.0	23.0	18.5	19.5	16.0	16.5	14.5
24	11.0	9.0	15.5	13.5	16.5	14.0	23.0	18.5	19.0	16.0	16.5	14.5
25	9.5	6.5	15.0	12.0	16.5	11.5	22.0	18.0	19.5	16.5	16.5	14.5
26	11.5	7.0	15.5	13.0	18.0	13.5	21.5	18.0	19.0	16.5	16.0	14.5
27	13.0	9.0	16.5	13.5	18.0	14.0	21.5	18.5	18.0	15.0	16.0	14.0
28	13.0	10.0	16.5	14.0	18.5	14.5	21.0	18.5	17.0	14.5	15.5	13.5
29	14.0	10.0	16.5	14.0	19.0	14.5	20.5	18.0	17.0	14.5	15.5	13.5
30	14.5	10.5	18.0	14.5	18.0	15.0	19.5	16.0	17.0	14.5	15.5	14.0
31	---	---	17.0	15.0	---	---	19.0	16.0	17.0	14.5	---	---
MONTH	14.5	6.5	18.0	8.0	20.0	11.5	23.0	14.0	20.5	14.5	19.0	13.5

11377100 SACRAMENTO RIVER ABOVE BEND BRIDGE, NEAR RED BLUFF, CALIF.

LOCATION.--Lat 40°17'19", long 122°11'08", in NW¼NE¼ sec.15, T.28 N., R.3 W., Tehama County, on left bank 2.7 mi (4.3 km) upstream from Bend Bridge, and 8.1 mi (13.0 km) northeast of Red Bluff.

DRAINAGE AREA.--8,900 mi² (23,050 km²), excluding Goose Lake basin.

PERIOD OF RECORD.--1879-88 annual observed maximums only, published in WSP 1315-A. January 1892 to current year. Monthly discharges only for some periods and yearly estimates for some incomplete years, published in WSP 1315-A. Published as "at Red Bluff" 1894-96, as "at Jellys Ferry" 1895-1902, and as "near Red Bluff" 1903-68.

GAGE.--Water-stage recorder. Datum of gage is 285.77 ft (87.103 m) above mean sea level. Prior to January 1902, nonrecording gage at site 6.1 mi (9.8 km) upstream at different datum. January 1902 to December 1919, nonrecording gage at several sites about 10 mi (16 km) downstream at different datum. December 1919 to September 1968, water-stage recorder at site 10.1 mi (16.3 km) downstream at different datum.

AVERAGE DISCHARGE.--84 years, 11,850 ft³/s (335.6 m³/s), 8,585,000 acre-ft/yr (10.6 km³/yr).

EXTREMES.--Current year: Maximum discharge, 84,600 ft³/s (2,400 m³/s) Feb. 13 (gage height, 24.44 ft or 7.449 m); minimum daily, 7,080 ft³/s (201 m³/s) Nov. 6.

Period of record: Maximum discharge, 291,000 ft³/s (8,240 m³/s) Feb. 28, 1940 (gage height, 38.9 ft or 11.86 m, site and datum then in use), from rating curve extended above 170,000 ft³/s (4,810 m³/s) on basis of velocity-area studies; minimum (1892 to current year), 2,000 ft³/s (56.6 m³/s) Mar. 29, 1944.

REMARKS.--Records excellent. Flow regulated by Shasta Lake since Dec. 30, 1943 (see sta 11370000). Diversions, in addition to those on tributaries, for irrigation of 22,000 acres (8,900 hm²) between stations at Keswick and above Bend Bridge. Transbasin diversions from Trinity River to Whiskeytown Lake via Judge Francis Carr powerplant (see sta 11525430) started in April 1963.

REVISIONS (WATER YEARS).--WSP 861: 1904, 1907, 1909, 1914-15, 1927-28. WSP 1315-A: 1914(M), 1916(M), 1918(M). WSP 1931: Drainage area. WRD Calif. 1969: 1965.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8490	10600	11200	7500	10700	11300	12400	16900	15100	12600	12500	12400
2	8430	9410	11400	7450	14800	11700	11800	16800	15100	12600	12500	12400
3	8490	8330	14100	7370	10500	11700	11500	17800	15100	12600	12600	11800
4	8450	7570	17700	7390	11100	11300	12800	18100	15300	12500	12500	10900
5	8410	7170	12400	7430	10400	11000	14800	17800	15400	12600	12400	9900
6	8370	7080	11800	10400	11500	11100	14500	17900	15900	12600	12500	9110
7	8370	7200	11600	10600	19900	22000	13300	17600	15800	12600	12400	9070
8	8330	8710	11500	17000	20500	30200	13700	17400	15500	12500	12400	9130
9	8450	10200	11500	10300	29800	28700	13100	17500	15400	12500	12500	9120
10	8410	11300	11400	8880	18200	28000	12400	17600	15400	12500	12500	9180
11	8390	11300	11400	8350	14900	25600	12100	17600	15300	12400	12400	9210
12	8390	11300	11400	8060	31800	23200	13100	17500	15300	12400	12500	9120
13	8490	11300	11500	7900	67000	22200	13600	17600	15200	12400	12300	9050
14	8470	11300	11500	7770	32600	24100	14200	17700	15100	12400	12400	9000
15	8470	11300	11400	7700	24700	20200	14000	17900	15100	12500	12300	9000
16	8430	11300	11400	7600	22300	21800	12300	17700	15100	12600	12300	8960
17	8390	11300	10800	7520	20900	21900	12900	17600	15000	12600	12400	8920
18	8380	11300	9680	7540	18800	50800	13200	17500	14900	12500	12500	8940
19	9000	11300	9200	7520	19800	69300	13700	17500	14300	12400	12900	8960
20	10100	11300	9200	7470	22700	52400	13500	16600	13900	12400	12600	9000
21	10400	11400	9120	7440	18800	53400	13200	16100	13400	12300	12600	8990
22	10500	11400	9060	7420	17800	54700	13100	15900	13000	12300	12500	8980
23	9460	11300	9030	7350	17300	41900	13200	15400	12900	12400	12400	8940
24	8480	11300	9010	7400	16900	44500	14100	15000	13000	12400	12400	8940
25	8490	11300	8510	7490	15700	65400	17000	15000	13000	12600	12400	8970
26	8530	11300	7650	7450	13800	42000	15900	15000	13000	12400	12400	8940
27	8620	11300	9230	7410	11900	31700	15100	14900	12900	12400	12400	8960
28	9250	11300	11700	7390	11000	27900	14700	15000	12800	12400	12500	9030
29	10000	11300	8310	7370	---	22100	15400	15000	12800	12400	12500	8980
30	10700	11300	7810	7330	---	17100	16700	15000	12700	12400	12400	8990
31	11200	---	7630	7980	---	13500	---	15100	---	12400	12400	---
TOTAL	276340	313770	329140	253780	556100	922700	411300	518000	432700	386600	386300	282890
MEAN	8914	10460	10620	8186	19860	29760	13710	16710	14420	12470	12460	9430
MAX	11200	11400	17700	17000	67000	69300	17000	18100	15900	12600	12900	12400
MIN	8330	7080	7630	7330	10400	11000	11500	14900	12700	12300	12300	8920
AC-FT	548100	622400	652800	503400	1103000	1830000	815800	1027000	858300	766800	766200	561100

CAL YR 1974 TOTAL 7191570 MEAN 19700 MAX 119000 MIN 7080 AC-FT 14260000
WTR YR 1975 TOTAL 5069620 MEAN 13890 MAX 69300 MIN 7080 AC-FT 10060000

11377100 SACRAMENTO RIVER ABOVE BEND BRIDGE, NEAR RED BLUFF, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: March 1970 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 15.0°C Sept. 6-9; minimum, 6.0°C Feb. 2.
Period of record:
Water temperatures: Maximum (1970-73, 1974 to current year), 15.5°C on several days in 1970 and 1973; minimum, 4.0°C Dec. 17, 1972, Jan. 9, 10, 1973.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.5	11.5	---	---	11.0	11.0	9.0	9.0	7.0	6.5	9.5	9.5
2	13.0	12.5	---	---	11.5	11.0	9.0	9.0	6.5	6.0	10.0	9.5
3	13.0	12.5	---	---	11.0	11.0	9.0	9.0	7.0	6.5	10.0	9.0
4	13.0	12.5	---	---	11.0	11.0	9.0	9.0	7.0	6.5	9.0	9.0
5	13.0	12.0	---	---	11.0	10.5	9.0	9.0	7.5	7.0	9.0	9.0
6	12.5	11.5	11.5	11.0	11.5	11.0	9.0	8.5	7.5	7.5	9.0	9.0
7	12.5	12.0	11.5	11.5	11.5	11.0	8.5	8.5	8.0	7.5	10.0	9.0
8	---	---	11.5	11.0	11.5	11.0	8.5	8.5	8.5	8.0	10.0	8.0
9	---	---	11.5	11.0	11.0	11.0	8.5	8.5	8.5	8.5	9.5	9.0
10	---	---	11.5	11.0	11.0	10.5	8.5	8.5	8.5	8.5	9.5	8.5
11	---	---	11.5	11.5	11.0	11.0	8.5	8.5	8.5	8.5	9.5	9.0
12	---	---	11.5	11.0	11.0	11.0	8.5	8.5	8.5	8.5	9.5	9.0
13	---	---	11.5	11.5	11.0	11.0	8.5	8.5	9.0	8.5	9.0	9.0
14	---	---	12.0	11.5	11.0	11.0	8.5	8.5	9.0	8.5	9.5	8.5
15	---	---	12.0	11.5	11.0	11.0	8.5	8.5	8.5	8.0	9.5	9.0
16	---	---	12.0	11.5	11.0	10.5	8.5	8.5	8.0	8.0	8.5	8.5
17	---	---	11.5	11.5	10.5	10.5	8.5	8.5	8.0	8.0	8.5	8.5
18	---	---	11.5	11.5	10.5	10.5	9.0	8.5	8.0	8.0	9.0	8.5
19	---	---	11.5	11.0	10.5	10.5	9.0	9.0	8.0	8.0	9.5	9.0
20	---	---	11.5	11.0	10.5	10.0	9.0	9.0	8.0	7.5	9.5	9.0
21	---	---	11.5	11.5	10.0	10.0	9.0	9.0	8.0	7.5	9.0	8.0
22	---	---	11.5	11.0	10.0	10.0	9.0	9.0	---	---	8.5	7.5
23	---	---	11.0	11.0	10.0	9.5	9.0	9.0	---	---	8.5	8.5
24	---	---	11.5	11.0	9.5	9.5	9.0	9.0	---	---	8.5	8.5
25	---	---	11.5	11.5	9.5	9.5	9.0	9.0	---	---	9.5	8.5
26	---	---	11.5	11.0	9.5	9.5	9.0	8.5	---	---	9.5	8.5
27	---	---	11.5	11.0	9.5	9.0	8.5	8.0	---	---	9.0	8.5
28	---	---	11.5	11.0	9.0	8.5	8.0	7.5	9.5	9.0	9.0	8.5
29	---	---	11.5	11.0	8.5	8.5	7.5	7.5	---	---	10.5	8.5
30	---	---	11.0	11.0	9.0	8.5	7.5	7.5	---	---	11.0	10.0
31	---	---	---	---	9.0	9.0	7.5	7.0	---	---	11.0	10.5
MONTH	---	---	12.0	11.0	11.5	8.5	9.0	7.0	9.5	6.0	11.0	7.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	10.0	11.0	9.5	13.0	11.5	11.0	10.5	13.0	11.0	14.0	12.5
2	10.5	10.0	11.5	10.0	12.5	11.0	11.0	10.5	13.5	11.5	14.0	12.0
3	9.5	9.0	11.5	10.0	13.5	12.0	11.5	11.0	13.5	11.0	14.0	12.5
4	9.0	8.5	10.5	9.5	14.0	12.0	11.5	11.5	13.0	12.5	14.5	12.5
5	8.5	8.0	11.0	9.5	14.0	12.5	11.5	11.5	13.0	12.0	14.5	13.0
6	9.5	8.0	11.0	10.0	14.0	13.5	12.0	11.5	13.5	11.5	15.0	13.5
7	9.0	8.5	11.5	10.0	14.0	13.5	12.0	12.0	13.0	11.0	15.0	13.5
8	9.0	8.0	11.5	10.5	13.5	12.5	12.5	12.0	13.5	11.0	15.0	13.5
9	10.0	8.5	11.5	10.5	13.5	12.0	12.5	12.5	13.0	11.0	15.0	14.5
10	10.5	9.5	11.5	10.5	13.5	11.5	12.5	12.0	13.5	11.0	14.5	14.0
11	10.5	9.5	11.5	10.0	13.5	11.5	12.5	12.0	13.5	11.5	14.0	14.0
12	10.5	9.5	12.0	10.5	13.0	12.0	13.0	12.5	14.0	11.5	14.0	14.0
13	10.5	10.0	12.0	10.5	13.0	12.0	13.0	12.5	14.0	12.0	14.0	14.0
14	10.5	9.0	12.0	10.5	13.5	11.5	12.5	12.5	14.0	12.0	14.0	13.5
15	9.5	8.5	12.0	10.5	13.5	11.5	12.5	12.5	14.0	11.5	14.5	13.5
16	9.5	9.0	12.0	10.5	13.0	11.5	12.5	12.5	14.0	11.5	14.5	13.0
17	10.0	9.0	12.0	10.5	13.0	12.0	12.5	12.5	13.5	12.0	14.0	13.0
18	10.0	9.5	12.5	10.5	12.5	11.0	12.5	12.5	13.5	12.0	14.0	13.0
19	11.0	9.5	12.0	11.0	12.0	11.0	12.5	12.5	13.5	12.0	14.0	13.0
20	11.0	10.0	11.0	10.0	12.5	10.5	12.5	12.5	13.5	12.0	14.5	14.0
21	11.0	10.0	11.5	10.0	12.5	11.0	12.5	12.0	13.5	12.0	14.5	13.0
22	11.0	10.0	11.5	10.5	12.0	11.0	13.0	12.0	13.5	13.5	14.0	13.0
23	10.0	9.0	12.5	10.5	12.0	11.0	13.0	12.0	14.0	13.5	14.0	12.5
24	9.0	9.0	12.5	11.0	11.5	10.5	13.0	12.0	14.0	12.0	14.0	13.0
25	9.0	8.5	12.5	11.0	11.5	10.0	13.0	13.0	14.5	13.0	14.0	12.5
26	10.0	8.5	12.0	11.0	11.5	10.5	13.0	12.0	14.0	12.5	14.0	13.0
27	10.5	9.5	13.0	11.0	11.5	10.5	13.0	11.0	13.5	12.0	14.0	13.0
28	10.5	9.5	13.0	11.0	11.5	10.5	13.0	12.5	13.5	12.0	14.0	12.5
29	10.5	9.5	13.0	11.5	11.5	10.5	12.5	12.5	13.5	12.0	13.5	12.5
30	10.5	9.5	13.5	12.0	11.5	11.0	12.5	11.0	14.0	12.0	14.0	13.0
31	---	---	13.5	12.0	---	---	12.0	10.5	14.0	12.0	---	---
MONTH	11.0	8.0	13.5	9.5	14.0	10.0	13.0	10.5	14.5	11.0	15.0	12.0

11378800 RED BANK CREEK NEAR RED BLUFF, CALIF.

LOCATION.--Lat 40°05'25", long 122°24'45", in NE¼SE¼ sec.22, T.26 N., R.5 W., Tehama County, on road bridge near bank 0.1 mi (0.2 km) downstream from unnamed tributary, 1.8 mi (2.9 km) southeast of town of Red Bank, and 11 mi (18 km) southwest of Red Bluff.

DRAINAGE AREA.--93.5 mi² (242.2 km²).

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 470 ft (143 m), from topographic map.

AVERAGE DISCHARGE.--16 years, 49.7 ft³/s (1.408 m³/s), 36,010 acre-ft/yr (44.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,310 ft³/s (179 m³/s) Mar. 7 (gage height, 9.41 ft or 2.868 m); no flow for several months.
Period of record: Maximum discharge, 9,730 ft³/s (276 m³/s) Jan. 5, 1965 (gage height, 10.06 ft or 3.066 m); no flow for several months in each year.

REMARKS.--Some small storage ponds and possibly some diversions for irrigation upstream.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	10	155	22	118	20	2.2	0		
2			0	7.7	114	26	102	20	2.5	0		
3			290	5.3	71	23	92	20	2.4	0		
4			295	4.7	148	21	84	20	1.8	0		
5			25	4.3	76	21	86	19	1.6	0		
6			12	8.5	160	24	80	17	1.4	0		
7			7.6	11	432	2120	69	14	1.3	0		
8			5.4	11	927	1480	64	13	1.0	0		
9			3.7	12	1070	559	54	12	.80	0		
10			2.7	9.9	331	629	47	11	.60	0		
11			2.1	7.7	146	346	41	11	.60	0		
12			1.9	5.6	781	194	38	10	.50	0		
13			1.6	4.3	894	138	37	9.4	.40	0		
14			1.3	3.9	201	104	43	8.9	.40	0		
15			1.2	3.4	111	100	41	8.8	.30	0		
16			1.1	2.8	84	153	34	8.2	.30	0		
17			.90	2.1	63	636	31	7.2	.30	0		
18			.80	1.9	46	728	29	6.3	.30	0		
19			.70	1.6	43	362	28	4.9	.20	0		
20			.70	1.5	43	233	26	4.5	.20	0		
21			.70	1.3	34	1610	25	5.4	.20	0		
22			.70	1.1	28	1100	23	5.4	.10	0		
23			.60	1.0	25	734	26	5.2	.10	0		
24			.50	.90	26	1110	31	4.4	.10	0		
25			.50	.90	25	977	33	3.8	.10	0		
26			.60	.80	23	462	29	3.7	0	0		
27			69	.60	22	314	24	3.5	0	0		
28			106	.60	22	225	23	3.0	0	0		
29			30	.50	---	183	22	2.8	0	41		
30			17	.50	---	160	21	2.5	0	2.3		
31		---	12	3.1	---	140	---	2.2	---	.30		---
TOTAL	0	0	891.30	130.50	6101	14934	1401	287.1	19.70	43.60	0	0
MEAN	0	0	28.8	4.21	218	482	46.7	9.26	.66	1.41	0	0
MAX	0	0	295	12	1070	2120	118	20	2.5	41	0	0
MIN	0	0	0	.50	22	21	21	2.2	0	0	0	0
AC-FT	0	0	1770	259	12100	29620	2780	569	39	86	0	0

CAL YR 1974 TOTAL 25731.80 MEAN 70.5 MAX 3510 MIN 0 AC-FT 51040
WTR YR 1975 TOTAL 23808.20 MEAN 65.2 MAX 2120 MIN 0 AC-FT 47220

11379000 ANTELOPE CREEK NEAR RED BLUFF, CALIF.

LOCATION.--Lat 40°12'14", long 122°07'02", in Rio De Los Berrendos Grant, Tehama County, on right bank 1.8 mi (2.9 km) upstream from diversion dam of Los Molinos Mutual Water Co., 6.5 mi (10.5 km) east of Red Bluff, and 9.7 mi (15.6 km) upstream from mouth.

DRAINAGE AREA.--123 mi² (319 km²).

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 360 ft (110 m), from topographic map. Prior to Sept. 18, 1954, at site 0.6 mi (1.0 km) downstream at different datum. Sept. 18, 1954, to July 9, 1969, at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--35 years, 153 ft³/s (4.33 m³/s), 110,800 acre-ft/yr (137 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,250 ft³/s (120 m³/s) Feb. 13 (gage height, 12.13 ft or 3.697 m); minimum daily, 46 ft³/s (1.30 m³/s) Aug. 3, 4, 10.

Period of record: Maximum discharge, 17,200 ft³/s (487 m³/s) Jan. 23, 1970 (gage height, 17.95 ft or 5.471 m), from rating curve extended above 6,000 ft³/s (170 m³/s) on basis of slope-area measurement at gage height 15.96 ft (4.865 m), present datum; minimum, 8.2 ft³/s (0.23 m³/s) Oct. 27, 1961.

Flood of December 1937 reached a stage of about 22 ft (6.7 m), from floodmarks, at former site and datum.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. No diversion above station.

REVISIONS (WATER YEARS).--WSP 1315-A: 1949(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	62	60	71	661	128	218	197	296	77	47	52
2	51	58	63	68	1000	161	201	191	280	76	47	52
3	52	57	277	64	332	164	193	202	264	73	46	51
4	52	55	331	63	368	152	190	234	248	73	46	49
5	51	54	96	64	265	144	197	207	248	72	47	48
6	50	53	75	272	328	175	210	191	243	70	47	47
7	50	60	68	205	615	1140	211	184	235	67	47	47
8	51	67	64	236	1030	1040	344	185	209	65	47	49
9	63	60	61	170	1200	872	335	189	188	64	47	48
10	56	58	60	123	745	556	260	196	177	62	46	50
11	54	55	58	102	358	403	229	202	167	60	47	54
12	54	54	59	89	1200	292	212	225	157	60	47	53
13	53	54	67	81	2030	254	203	247	149	59	48	49
14	53	55	62	78	878	240	248	273	141	58	49	49
15	53	56	61	77	427	208	239	298	138	60	50	50
16	53	57	60	73	294	333	220	285	133	71	50	49
17	52	57	59	69	224	252	208	284	125	63	52	48
18	53	63	58	67	188	316	191	299	118	60	70	49
19	54	62	58	65	219	852	200	320	111	59	72	49
20	54	60	57	65	307	686	192	306	109	57	65	49
21	53	63	57	63	215	735	182	265	102	56	59	48
22	53	71	58	62	183	721	178	251	97	55	58	47
23	52	64	57	62	163	471	177	249	94	52	58	47
24	54	62	55	60	149	468	245	262	93	50	58	47
25	55	67	55	60	139	883	422	265	103	50	58	47
26	54	66	55	60	132	640	316	252	93	49	57	47
27	56	63	201	61	128	460	268	254	89	48	56	47
28	66	62	339	59	127	359	238	261	86	48	54	47
29	69	61	128	57	---	299	219	270	83	48	53	47
30	62	60	92	57	---	262	207	280	79	47	53	47
31	72	---	78	91	---	240	---	289	---	47	52	---
TOTAL	1705	1796	2929	2794	13905	13906	6953	7613	4655	1856	1633	1463
MEAN	55.0	59.9	94.5	90.1	497	449	232	246	155	59.9	52.7	48.8
MAX	72	71	339	272	2030	1140	422	320	296	77	72	54
MIN	50	53	55	57	127	128	177	184	79	47	46	47
AC-FT	3380	3560	5810	5540	27580	27580	13790	15100	9230	3680	3240	2900

CAL YR 1974 TOTAL 85083 MEAN 233 MAX 4940 MIN 50 AC-FT 168600
WTR YR 1975 TOTAL 61208 MEAN 168 MAX 2030 MIN 46 AC-FT 121400

Peak discharge (base, 2,200 ft³/s).--Feb. 13 (0900) 4,250 ft³/s (12.13 ft); Mar. 7 (2115) 2,210 ft³/s (9.77 ft).

NOTE.--No gage-height record Oct. 10 to Nov. 15, July 25 to Aug. 14.

11379500 ELDER CREEK NEAR PASKENTA, CALIF.

LOCATION.--Lat 40°01'29", long 122°30'31", in SE¼NW¼ sec.14, T.25 N., R.6 W., Tehama County, on left bank 2.5 mi (4.0 km) downstream from South Fork Elder Creek, 8.2 mi (13.2 km) northwest of Flournoy, and 10 mi (19 km) north of Paskenta.

DRAINAGE AREA.--92.9 mi^2 (241 km^2).

PERIOD OF RECORD.--October 1948 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 718.1 ft (218.88 m) above mean sea level. Prior to Aug. 13, 1965, water-stage recorder at site 300 ft (91 m) downstream at datum 5.13 ft (1.564 m) lower.

AVERAGE DISCHARGE.--27 years, 104 ft^3/s (2.945 m^3/s), 75,350 acre-ft/yr (92.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 9,000 ft^3/s (255 m^3/s) Mar. 7 (gage height, 11.22 ft or 3.420 m); minimum daily, 3.0 ft^3/s (0.085 m^3/s) Sept. 25-27.

Period of record: Maximum discharge, 11,700 ft^3/s (331 m^3/s) Feb. 24, 1958 (gage height, 13.90 ft or 4.237 m, site and datum then in use), from rating curve extended above 3,500 ft^3/s (99.1 m^3/s) on basis of slope-area measurements at gage heights 10.97 ft (3.344 m) and 13.90 ft (4.237 m); no flow at times in some years.

REVISIONS.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supercede figures published in the California annual reports indicated.

WRD Calif.	Water year	Date	Discharge (ft^3/s)	Gage height (feet)
1966	1966	Nov. 14, 1965	6,120	9.53
1967	1967	Dec. 4, 1966	3,870	7.91
1969	1969	Jan. 13, 1969	4,510	8.38
1970	1970	Jan. 23, 1970	8,690	11.05
1971	1971	Mar. 26, 1971	4,300	8.23
1973	1973	Jan. 16, 1973	4,750	8.55

REMARKS.--Records good. No regulation or large diversion above station.

REVISIONS (WATER YEARS).--WSP 1515: 1956. WSP 1931: Drainage area. The figures of peak discharge for some water years have been revised as given herewith. They supercede figures published in WRD Calif. 1966-73.

REVISED PEAK DISCHARGE.--1966: Nov. 14 (2300) 6,120 ft^3/s (9.53 ft); Nov. 17 (time unknown) 1,720 ft^3/s (5.70 ft); Dec. 28 (1200) 1,440 ft^3/s (5.30 ft); Jan. 4 (1730) 4,810 ft^3/s (8.59 ft).

1967: Nov. 19 (1930) 2,920 ft^3/s (7.04 ft); Dec. 4 (2245) 3,870 ft^3/s (7.91 ft); Jan. 26 (0900) 2,840 ft^3/s (6.96 ft); Jan. 29 (0530) 3,580 ft^3/s (7.67 ft).

1969: Dec. 15 (1015) 2,760 ft^3/s (6.88 ft); Jan. 13 (time unknown) 4,510 ft^3/s (8.38 ft); Jan. 19 (2015) 4,500 ft^3/s (8.37 ft); Jan. 26 (0015) 3,190 ft^3/s (7.31 ft).

1970: Dec. 21 (0730) 1,850 ft^3/s (5.86 ft); Jan. 16 (time unknown) 3,610 ft^3/s (7.69 ft); Jan. 23 (2100) 8,690 ft^3/s (11.05 ft); Jan. 26 (2300) 6,180 ft^3/s (9.57 ft).

1971: Mar. 26 (0045) 4,300 ft^3/s (8.23 ft).

1973: Nov. 13 (2300) 3,570 ft^3/s (7.66 ft); Nov. 15 (1915) 3,510 ft^3/s (7.61 ft); Jan. 16 (0815) 4,750 ft^3/s (8.55 ft); Jan. 18 (0815) 4,550 ft^3/s (8.41 ft).

11379500 ELDER CREEK NEAR PASKENTA, CALIF.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	11	9.2	23	145	177	316	182	106	21	7.5	4.9
2	4.1	8.8	68	21	156	193	282	197	97	20	7.1	4.6
3	4.2	8.1	733	20	94	164	261	212	85	20	6.8	4.3
4	4.3	8.1	214	22	161	144	243	196	75	19	6.5	4.1
5	4.1	8.1	60	22	105	138	233	172	69	19	6.4	3.9
6	4.1	8.1	36	62	204	182	225	160	64	18	6.3	3.7
7	4.2	9.1	27	58	405	3670	206	164	59	17	6.1	3.6
8	4.7	11	23	116	799	1370	203	181	52	17	5.9	3.5
9	5.8	9.2	20	63	858	684	184	204	47	16	5.7	3.6
10	5.7	8.8	19	44	410	652	177	210	43	15	5.6	4.4
11	5.2	8.6	18	36	218	457	166	201	41	15	5.4	4.7
12	4.8	8.1	18	31	1390	337	162	196	39	14	5.2	4.3
13	4.7	8.1	21	28	1430	294	170	217	36	14	5.1	3.9
14	4.6	8.1	18	26	476	247	185	252	33	13	5.2	3.9
15	4.6	8.1	17	25	289	242	174	243	32	19	5.2	3.9
16	4.6	8.1	17	24	214	268	161	214	31	24	5.2	3.8
17	4.5	8.1	16	23	168	678	150	204	29	19	5.7	3.7
18	4.4	9.6	15	23	142	1110	142	212	29	18	7.1	3.6
19	4.4	9.1	14	22	216	851	140	213	29	16	10	3.6
20	4.4	9.1	14	22	262	521	140	183	29	15	8.1	3.7
21	4.2	13	14	21	183	1100	147	150	27	14	6.5	3.5
22	4.3	13	14	20	149	619	159	136	26	13	6.2	3.4
23	4.8	11	13	20	132	461	163	135	25	12	5.8	3.2
24	5.4	10	12	20	125	772	255	142	26	11	5.4	3.2
25	5.6	11	13	20	127	1450	278	139	26	9.5	5.2	3.0
26	5.9	11	12	19	126	709	218	127	25	8.6	5.0	3.0
27	7.2	9.9	107	18	130	506	190	125	23	8.2	5.3	3.0
28	27	9.4	111	16	161	400	179	120	22	8.2	6.4	3.1
29	14	9.4	39	16	---	345	173	117	21	8.4	6.1	3.1
30	9.4	9.1	28	16	---	351	175	115	20	9.2	5.7	3.1
31	13	---	25	18	---	365	---	111	---	8.4	5.4	---
TOTAL	192.4	281.9	1765.2	915	9275	19457	5857	5430	1266	459.5	189.1	111.3
MEAN	6.21	9.40	56.9	29.5	331	628	195	175	42.2	14.8	6.10	3.71
MAX	27	13	733	116	1430	3670	316	252	106	24	10	4.9
MIN	4.1	8.1	9.2	16	94	138	140	111	20	8.2	5.0	3.0
AC-FT	382	559	3500	1810	18400	38590	11620	10770	2510	911	375	221

CAL YR 1974 TOTAL 56500.6 MEAN 155 MAX 5860 MIN 3.7 AC-FT 112100
WTR YR 1975 TOTAL 45199.4 MEAN 124 MAX 3670 MIN 3.0 AC-FT 89650

Peak discharge (base, 1,200 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
12-3	1945	6.41	2,310	3-17	2015	5.65	1,680
2-8	2200	7.91	3,870	3-21	1330	6.54	2,430
2-12	1515	7.81	3,750	3-25	0200	6.46	2,350
3-7	1030	11.22	9,000				

11381500 MILL CREEK NEAR LOS MOLINOS, CALIF.

LOCATION.--Lat 40°03'17", long 122°01'23", in NE¼NW¼ sec.6, T.25 N., R.1 W., Tehama County, on right bank 4.5 mi (7.2 km) northeast of Los Molinos, and 5.5 mi (8.8 km) upstream from mouth.

DRAINAGE AREA.--131 mi^2 (339 km^2).

PERIOD OF RECORD.--September 1909 to August 1913 (fragmentary), October 1928 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 385 ft (117 m), from topographic map. Prior to September 1913, nonrecording gage at site 0.3 mi (0.5 km) downstream at different datum.

AVERAGE DISCHARGE.--47 years (1928-75), 307 ft^3/s (8.694 m^3/s), 222,400 acre-ft/yr (274 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5,930 ft^3/s (168 m^3/s) Feb. 13 (gage height, 9.45 ft or 2.880 m); minimum daily, 118 ft^3/s (3.34 m^3/s) Sept. 28-30.

Period of record (1928 to current year): Maximum discharge, 36,400 ft^3/s (1,030 m^3/s) Dec. 11, 1937 (gage height, 23.4 ft or 7.13 m, from floodmarks), from rating curve extended above 14,000 ft^3/s (396 m^3/s) on basis of step-backwater computation and slope-area measurement of maximum flow; minimum, 49 ft^3/s (1.39 m^3/s) Dec. 13, 1932.

REMARKS.--Records good. No storage or large diversion above station.

REVISIONS (WATER YEARS).--WSP 1315-A: 1929(M). WSP 1931: Drainage area. WRD Calif. 1969: 1938(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	160	130	129	564	303	359	439	871	315	163	142
2	128	143	131	126	955	381	329	477	716	306	161	138
3	130	138	283	123	322	383	315	564	732	300	159	136
4	130	135	380	126	477	338	313	589	718	300	158	133
5	127	135	180	126	292	315	306	487	794	304	155	133
6	127	135	154	281	369	372	301	448	833	307	152	133
7	127	144	145	245	538	1160	288	458	801	304	151	132
8	125	175	138	426	1060	1320	464	507	781	299	151	132
9	127	149	135	257	1700	1430	425	571	609	291	147	131
10	129	145	132	197	988	874	342	615	599	289	148	134
11	126	143	130	172	465	605	308	642	584	283	147	142
12	125	143	140	159	1370	461	300	722	597	284	146	135
13	124	140	168	151	2490	405	309	745	599	280	144	131
14	124	140	143	146	1020	364	388	850	680	265	143	130
15	125	140	145	143	573	329	355	917	642	264	144	130
16	124	140	140	142	426	454	330	797	639	344	147	128
17	124	138	135	138	341	354	311	821	582	276	156	127
18	124	150	132	138	296	501	292	872	492	251	182	125
19	124	146	129	138	322	1480	309	937	432	237	199	127
20	124	140	127	138	408	1020	306	811	407	227	186	124
21	123	150	128	138	320	945	319	617	440	219	170	122
22	122	162	129	138	284	827	341	592	433	211	175	121
23	124	150	127	138	262	609	348	641	428	205	172	121
24	124	143	121	136	249	603	657	706	420	197	162	120
25	125	149	119	140	242	1340	989	725	364	193	162	120
26	127	146	119	151	240	937	641	648	336	187	161	120
27	128	138	265	148	248	671	511	678	334	183	157	119
28	175	135	398	135	270	523	470	715	330	178	154	118
29	161	132	161	134	---	441	444	738	331	172	152	118
30	139	130	143	130	---	409	442	772	336	172	150	118
31	171	---	133	156	---	399	---	860	---	169	148	---
TOTAL	4043	4314	5040	5045	17091	20553	11812	20961	16700	7812	4902	3840
MEAN	130	144	163	163	610	663	394	676	557	252	158	128
MAX	175	175	398	426	2490	1480	989	937	871	344	199	142
MIN	122	130	119	123	240	303	288	439	330	169	143	118
AC-FT	8020	8560	10000	10010	33900	40770	23430	41580	33120	15500	9720	7620

CAL YR 1974 TOTAL 167964 MEAN 460 MAX 7640 MIN 119 AC-FT 333200
WTR YR 1975 TOTAL 122113 MEAN 335 MAX 2490 MIN 118 AC-FT 242200

Peak discharge (base, 2,400 ft^3/s).--Feb. 9 (0330) 2,970 ft^3/s (7.07 ft); Feb. 13 (0800) 5,930 ft^3/s (9.45 ft).

NOTE.--No gage-height record Aug. 15 to Sept. 30.

11382000 THOMES CREEK AT PASKENTA, CALIF.

LOCATION.--Lat 39°53'16", long 122°31'41", in SE¼SW¼ sec.34, T.24 N., R.6 W., Tehama County, on left bank 1.2 mi (1.9 km) downstream from Digger Creek, and 1.0 mi (1.6 km) downstream from highway bridge at Paskenta. Prior to Oct. 10, 1974, at site 1.4 mi (2.3 km) upstream.

DRAINAGE AREA.--194 mi^2 (502 km^2).

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to 1943, published as Thomas Creek at Paskenta.

GAGE.--Water-stage recorder. Altitude of gage is 720 ft (219 m), from topographic map. Prior to June 20, 1942, nonrecording gage and water-stage recorder at several sites about 1.5 mi (2.4 km) upstream at different datums, June 21, 1942, to Sept. 30, 1959, water-stage recorder at site 1.4 mi (2.3 km) upstream at datum 732.85 ft (223.373 m) and Oct. 1, 1959, to Oct. 9, 1974, at datum 731.1 ft (222.84 m) above mean sea level.

AVERAGE DISCHARGE.--55 years, 292 ft^3/s (8.269 m^3/s), 211,600 acre-ft/yr (261 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 10,400 ft^3/s (295 m^3/s) Mar. 7 (gage height, 8.20 ft or 2.499 m); minimum daily, 4.4 ft^3/s (0.12 m^3/s) Sept. 27.

Period of record: Maximum discharge, 37,800 ft^3/s (1,070 m^3/s) Dec. 22, 1964 (gage height, 11.4 ft or 3.47 m, from floodmarks, present site and datum), from rating curve extended above 6,000 ft^3/s (170 m^3/s) on basis of slope-area measurement of peak flow; no flow at times in many years.

REMARKS.--Records fair. No storage or large diversions above station.

REVISIONS (WATER YEARS).--WSP 1345: 1923, 1924-28(M), 1938, 1940(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	22	18	50	145	1080	1100	783	637	76	19	12
2	6.0	19	37	47	217	1210	894	948	534	70	18	11
3	6.3	17	273	46	133	1080	766	1060	490	62	17	10
4	6.6	15	332	89	177	967	783	930	453	60	16	9.5
5	6.3	14	110	99	135	858	689	719	475	58	14	9.7
6	6.3	14	73	678	180	858	565	645	437	53	14	8.6
7	6.0	14	62	490	358	4180	519	719	378	50	13	8.1
8	6.6	19	60	975	884	2440	495	777	353	47	13	8.6
9	8.5	23	57	418	1510	1830	475	930	297	45	12	8.8
10	7.7	19	51	263	841	1430	452	981	281	44	12	9.3
11	7.3	17	48	207	545	1030	435	923	268	45	12	11
12	5.8	16	85	175	2100	791	430	951	261	44	11	11
13	6.0	15	170	158	4290	712	610	1070	251	42	10	11
14	5.6	15	92	149	1420	604	674	1330	236	40	9.7	10
15	5.5	14	107	144	930	564	564	1270	223	46	9.5	10
16	5.4	14	97	133	743	521	486	1130	205	54	9.5	9.5
17	5.3	14	77	125	631	787	432	1000	178	49	10	9.0
18	5.2	15	64	131	577	2240	412	1070	164	45	11	8.8
19	5.1	19	57	137	1330	3190	437	1070	148	41	15	8.8
20	5.3	19	54	131	1700	1730	470	852	135	38	17	8.8
21	5.2	18	56	129	1020	2200	527	613	128	36	17	8.7
22	5.3	20	62	114	799	1600	610	554	125	34	15	8.1
23	5.2	26	48	108	696	1290	624	581	119	31	15	8.1
24	5.8	21	42	105	735	1670	1600	661	116	29	14	6.6
25	6.9	22	39	108	791	4610	1650	678	107	26	13	4.6
26	7.3	29	39	102	783	2440	1070	577	98	25	12	4.5
27	9.2	24	141	90	816	1830	903	609	93	22	12	4.4
28	35	22	140	78	1010	1320	867	592	87	21	12	4.5
29	38	20	77	74	---	1070	816	608	84	21	12	4.5
30	24	19	67	66	---	1220	850	628	84	21	12	5.0
31	23	---	57	77	---	1370	---	679	---	20	12	---
TOTAL	287.4	555	2692	5696	25496	48722	21205	25938	7445	1295	408.7	252.5
MEAN	9.27	18.5	86.8	184	911	1572	707	837	248	41.8	13.2	8.42
MAX	38	29	332	975	4290	4610	1650	1330	637	76	19	12
MIN	5.1	14	18	46	133	521	412	554	84	20	9.5	4.4
AC-FT	570	1100	5340	11300	50570	96640	42060	51450	14770	2570	811	501

CAL YR 1974 TOTAL 168836.7 MEAN 463 MAX 19600 MIN 5.1 AC-FT 334900
WTR YR 1975 TOTAL 139992.6 MEAN 384 MAX 4610 MIN 4.4 AC-FT 277700

Peak discharge (base, 1,800 ft^3/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-8	2200	6.15	3,410	3-19	0130	6.65	4,600
2-13	0730	7.40	6,980	3-21	1330	6.20	3,510
2-19	2000	6.22	3,560	3-25	0300	7.45	7,170
3-7	1100	8.20	10,400	4-24	2000	6.10	3,160

11382000 THOMES CREEK AT PASKENTA, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1958 to current year.
Water temperatures: October 1961 to current year.
Sediment records: October 1962 to September 1973.

EXTREMES.--Current year:
Water temperatures: Maximum, 33.5°C July 24; minimum, 1.0°C Jan. 31, Feb. 1.
Period of record:
Water temperatures: Maximum, 36.5°C Aug. 2, 4, 1974; minimum, freezing point on several days during most years.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED BORON (B) (UG/L)
NOV.												
15...	1000	14	16	170	0	139	23	.03	203	64	.5	100
MAR.												
06...	0900	885	3.5	72	0	59	2.4	.19	65	6	.2	100
MAY												
20...	0920	876	2.1	49	0	40	.0	.08	46	6	.1	0

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
OCT.							
11...	0830	7.3	447	8.0	15.0	1	9.9
NOV.							
15...	1000	14	408	8.3	11.0	1	12.5
DEC.							
10...	1000	56	338	8.2	5.5	1	11.6
JAN.							
16...	1010	139	190	7.9	5.0	8	12.1
FEB.							
11...	0940	545	194	7.7	6.5	64	12.4
MAR.							
06...	0900	885	141	7.6	8.0	70	11.0
APR.							
22...	1010	624	156	7.8	9.0	27	10.9
MAY							
20...	0920	876	96	7.7	9.0	32	11.1
JUNE							
16...	0925	210	131	8.4	21.0	6	8.4
JULY							
23...	0935	31	267	8.4	27.0	0	9.2
AUG.							
19...	1010	15	308	8.3	22.5	1	9.2
SEP.							
19...	1020	8.8	342	8.1	24.0	6	9.9

11382000 THOMES CREEK AT PASKENTA, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	28.5	15.5	14.0	8.5	9.5	6.5	5.5	3.5	2.5	1.0	7.0	6.5
2	28.5	16.0	14.5	6.0	9.0	8.5	5.0	2.5	5.5	2.0	7.5	6.5
3	27.5	17.0	16.0	7.0	9.5	8.0	5.0	2.5	5.0	2.5	7.0	6.0
4	24.5	15.0	15.5	7.0	8.5	6.5	5.0	3.5	5.5	3.5	8.0	6.0
5	23.0	12.5	16.0	7.5	8.5	6.5	4.5	3.5	5.0	4.0	7.0	6.5
6	24.0	12.5	15.0	8.0	9.5	7.0	5.0	4.5	5.5	4.5	7.5	7.0
7	25.0	13.0	11.0	9.0	9.5	6.5	5.0	5.0	7.5	7.0	8.0	7.5
8	20.0	15.5	12.0	6.0	9.0	6.0	5.0	4.5	8.0	6.0	8.0	7.0
9	24.5	14.0	13.0	5.5	8.5	6.0	4.5	3.5	7.5	5.5	8.0	7.0
10	24.0	13.5	15.0	5.5	8.0	6.0	4.5	3.5	7.0	6.0	7.5	7.0
11	23.0	13.0	15.0	11.0	8.0	7.0	5.0	3.5	7.5	5.5	8.0	6.5
12	23.5	12.5	15.5	10.0	7.5	7.0	5.5	3.5	7.0	5.5	8.0	6.0
13	24.0	12.5	16.0	10.5	8.0	6.0	5.5	3.0	6.0	5.0	6.5	6.0
14	24.5	12.0	15.5	10.5	8.0	6.0	5.5	3.0	6.0	5.0	9.5	5.5
15	24.5	12.0	16.0	10.5	9.0	7.0	5.0	3.0	5.5	4.5	7.0	6.0
16	25.0	12.0	13.0	10.5	8.5	6.5	6.5	3.5	5.5	4.5	8.5	4.5
17	24.0	13.0	14.0	11.0	8.5	5.5	7.0	3.5	5.5	4.0	6.5	5.0
18	25.0	13.0	14.5	10.5	7.5	5.0	7.5	4.0	5.5	4.5	6.0	5.5
19	22.5	13.0	13.0	9.0	7.5	5.0	7.5	4.0	6.0	5.0	6.5	5.5
20	23.0	12.0	11.5	9.0	7.5	5.5	7.5	4.0	5.5	5.0	6.0	5.5
21	19.0	10.0	13.0	9.5	7.0	6.0	8.0	4.0	5.5	4.5	6.0	4.5
22	20.0	10.0	12.0	8.0	6.5	4.5	7.5	4.0	5.0	4.0	6.0	4.0
23	19.5	9.5	11.5	7.5	5.5	3.5	8.0	4.5	5.5	4.5	6.0	4.5
24	19.0	10.5	11.0	7.5	5.5	3.0	9.0	4.5	6.5	5.0	6.5	5.5
25	19.0	11.0	12.5	8.5	6.0	3.5	8.0	4.5	6.5	5.5	6.0	4.5
26	19.0	12.5	10.5	7.0	6.5	4.0	7.0	4.0	6.5	5.5	5.5	4.5
27	16.0	12.5	10.5	7.0	6.5	5.5	5.5	3.0	7.5	6.0	6.0	4.5
28	14.5	11.5	10.5	7.0	5.5	3.5	4.5	2.0	7.5	6.5	6.0	4.5
29	16.0	8.5	10.0	6.5	5.5	3.0	4.5	2.0	---	---	9.0	5.0
30	14.0	8.5	10.0	6.5	6.0	4.0	4.5	1.5	---	---	10.0	6.5
31	13.0	10.5	---	---	5.5	3.0	2.5	1.0	---	---	9.0	6.5
MONTH	28.5	8.5	16.0	5.5	9.5	3.0	9.0	1.0	8.0	1.0	10.0	4.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	6.0	12.5	8.0	18.0	13.5	24.5	16.0	30.5	22.0	28.5	21.0
2	9.0	7.0	12.0	8.0	18.0	13.0	25.0	17.5	32.0	22.5	29.0	20.0
3	10.0	7.5	10.5	7.5	18.5	13.5	25.5	18.0	32.5	23.5	29.0	20.5
4	7.5	6.5	8.0	6.0	20.0	13.5	24.0	18.0	32.5	24.0	30.0	21.0
5	7.5	6.5	10.5	6.0	21.0	15.0	26.0	17.5	32.5	23.5	30.5	21.5
6	9.5	6.5	12.0	7.0	20.5	14.5	27.0	19.0	31.0	23.5	31.0	22.0
7	7.5	6.5	13.0	7.5	21.0	15.5	28.0	20.0	29.0	21.0	30.5	22.0
8	9.0	7.0	13.5	8.5	20.0	14.0	29.5	21.0	32.0	22.0	30.0	22.0
9	11.5	6.5	12.0	8.5	21.0	14.0	29.5	22.0	32.5	23.5	26.0	23.0
10	12.0	7.5	11.0	8.5	22.0	15.0	28.5	22.5	33.0	23.5	23.5	21.0
11	12.5	7.5	12.5	8.0	21.0	15.5	30.0	22.5	33.0	24.0	29.0	20.5
12	13.0	7.5	13.0	8.0	23.5	16.5	30.5	23.0	32.5	24.0	30.0	21.5
13	12.0	8.0	14.0	9.0	24.0	17.0	31.0	23.5	32.5	24.0	29.5	22.0
14	9.5	8.0	13.5	9.5	25.0	17.5	30.0	23.5	32.5	24.0	29.5	21.5
15	9.0	6.5	12.5	9.0	25.0	18.5	24.5	22.0	32.0	24.0	29.0	21.0
16	10.5	6.0	13.5	9.0	24.5	18.5	29.5	21.0	32.0	24.0	28.5	21.0
17	10.5	5.5	14.5	9.0	23.5	17.5	30.0	23.0	27.0	24.0	28.5	20.5
18	11.5	7.0	15.0	10.0	23.0	15.5	30.0	23.0	27.0	22.5	29.0	21.5
19	12.5	8.5	13.5	9.5	21.5	15.5	30.5	23.0	29.5	22.5	29.0	21.0
20	12.5	7.5	11.5	7.5	24.5	15.5	31.0	24.0	29.5	22.0	29.5	21.5
21	12.0	8.0	13.0	8.0	24.5	16.5	31.5	24.0	28.5	23.0	28.0	22.0
22	10.0	8.0	14.0	10.0	24.5	17.5	32.0	24.0	31.0	22.5	28.5	20.0
23	9.0	8.0	16.0	11.0	23.5	17.5	32.5	24.5	30.5	23.0	28.0	21.0
24	9.0	7.5	16.0	11.0	19.5	15.0	33.5	25.0	31.5	23.0	28.5	20.5
25	7.5	6.5	14.5	10.0	23.0	14.0	32.5	24.5	32.0	23.5	28.5	20.5
26	9.0	6.5	16.5	11.0	24.0	15.5	32.0	24.0	31.0	24.0	27.5	20.0
27	10.0	7.0	16.5	11.5	24.5	16.5	32.5	24.5	24.5	22.0	27.5	19.5
28	10.5	7.5	17.0	11.5	25.0	17.0	32.5	25.0	28.0	20.0	27.0	19.0
29	11.5	7.5	17.5	12.0	25.0	17.0	31.5	24.0	29.0	20.5	27.0	18.5
30	12.0	8.0	18.5	12.5	23.0	17.5	30.5	23.0	29.0	20.5	27.0	19.0
31	---	---	18.5	13.0	---	---	30.0	22.0	28.5	21.0	---	---
MONTH	13.0	5.5	18.5	6.0	25.0	13.0	33.5	16.0	33.0	20.0	31.0	18.5

11383500 DEER CREEK NEAR VINA, CALIF.

LOCATION.--Lat 40°00'51", long 121°56'50", in NW¼NE¼ sec.23, T.25 N., R.1 W., Tehama County, on left bank 0.5 mi (0.8 km) upstream from diversion dam, and 7.9 mi (12.7 km) northeast of Vina.

DRAINAGE AREA.--208 mi^2 (539 km^2).

PERIOD OF RECORD.--October 1911 to December 1915, March 1920 to December 1937, January 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 479.5 ft (146.15 m) above mean sea level (river-profile survey). Prior to Oct. 9, 1928, nonrecording gage at site 0.8 mi (1.3 km) downstream at different datum. Oct. 9, 1928, to Jan. 19, 1939, water-stage recorder at present site at datum 2.64 ft (0.805 m) higher.

AVERAGE DISCHARGE.--57 years, 321 ft^3/s (9.09 m^3/s), 232,600 acre-ft/yr (287 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,880 ft^3/s (138 m^3/s) Feb. 9 (gage height, 8.46 ft or 2.579 m); minimum daily, 115 ft^3/s (3.26 m^3/s) Sept. 28.

Period of record: Maximum discharge, 23,800 ft^3/s (674 m^3/s) Dec. 10, 1937 (gage height, 19.2 ft or 5.85 m, present datum, from floodmarks), from rating curve extended above 9,200 ft^3/s (261 m^3/s) on basis of velocity-area studies; minimum, 43 ft^3/s (1.22 m^3/s) Dec. 13, 1932.

REMARKS.--Records excellent except those for period of no gage-height record, which are fair. No storage or large diversions above station.

REVISIONS (WATER YEARS).--WSP 1315-A: 1940-42(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	162	136	144	650	380	535	663	689	206	147	129
2	127	142	150	140	1090	526	487	703	653	202	146	129
3	128	135	275	139	380	541	466	811	610	199	145	127
4	127	134	405	139	540	465	448	855	572	197	144	126
5	126	133	198	165	340	425	438	705	559	193	143	124
6	125	133	170	315	425	466	429	649	548	189	142	123
7	125	143	155	275	680	1510	398	666	521	185	141	122
8	127	173	149	472	1400	2100	453	724	484	182	141	122
9	134	150	145	295	2450	2000	432	785	444	180	140	122
10	135	142	140	230	1150	1280	416	819	419	177	139	125
11	130	139	139	192	592	913	403	848	401	176	139	136
12	127	137	151	179	1890	701	415	941	379	173	138	129
13	126	135	179	170	2880	597	440	980	362	172	137	125
14	125	135	155	160	1570	515	566	1060	349	170	137	126
15	125	134	155	155	827	469	517	1090	340	172	136	124
16	125	133	150	152	584	583	465	980	330	190	135	122
17	125	133	146	152	449	468	426	975	316	179	136	121
18	125	143	143	151	381	636	405	994	301	172	160	120
19	125	148	140	151	388	1820	412	1040	296	168	165	121
20	125	137	139	152	493	1520	413	954	285	166	152	120
21	124	155	142	152	399	1370	446	793	268	163	144	118
22	124	207	145	152	348	1120	484	745	257	161	149	117
23	125	155	136	151	318	860	484	724	249	159	142	118
24	126	144	129	151	301	865	811	733	256	156	137	117
25	127	150	128	155	298	2230	1290	727	269	154	136	116
26	128	149	160	172	297	1600	888	677	241	152	135	116
27	132	142	320	165	308	1100	733	671	229	151	133	116
28	174	138	440	156	345	844	693	668	221	150	133	115
29	178	136	180	152	---	696	660	671	216	150	133	116
30	142	135	160	150	---	625	659	673	210	152	131	116
31	165	---	149	220	---	606	---	683	---	149	130	---
TOTAL	4084	4332	5509	5704	21773	29841	16112	25007	11274	5345	4366	3658
MEAN	132	144	178	184	778	963	537	807	376	172	141	122
MAX	178	207	440	472	2880	2230	1290	1090	689	206	165	136
MIN	124	133	128	139	297	380	398	649	210	149	130	115
AC-FT	8100	8590	10930	11310	43190	59190	31960	49600	22360	10600	8660	7260

CAL YR 1974 TOTAL 197297 MEAN 541 MAX 8520 MIN 124 AC-FT 391300
WTR YR 1975 TOTAL 137005 MEAN 375 MAX 2880 MIN 115 AC-FT 271700

Peak discharge (base, 2,500 ft^3/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-9	unknown	8.46	4,880	3-7	1600	6.68	2,670
2-12	1615	7.89	4,090	3-25	1115	6.63	2,610

NOTE.--No gage-height record Dec. 25 to Feb. 11.

11384000 BIG CHICO CREEK NEAR CHICO, CALIF.

LOCATION.--Lat 39°46'35", long 121°45'10", in Arroyo Chico Grant, Butte County, on right bank 1.8 mi (2.9 km) upstream from golf clubhouse in Bidwell Park, 2.6 mi (4.2 km) upstream from Lindo Channel, and 7 mi (11 km) northeast of Chico.

DRAINAGE AREA.--72.4 mi^2 (187.5 km^2).

PERIOD OF RECORD.--May 1930 to current year. Prior to October 1952, published as Chico Creek near Chico.

GAGE.--Water-stage recorder. Altitude of gage is 300 ft (91 m), from topographic map. Prior to Oct. 1, 1955, at site 0.6 mi (1.0 km) downstream at different datum.

AVERAGE DISCHARGE.--45 years, 149 ft^3/s (4.220 m^3/s), 108,000 acre-ft/yr (133 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,570 ft^3/s (101 m^3/s) Feb. 13 (gage height, 8.76 ft or 2.670 m); minimum daily, 23 ft^3/s (0.65 m^3/s) Sept. 17, 18, 24, 25.

Period of record: Maximum discharge, 9,580 ft^3/s (271 m^3/s) Jan. 5, 1965 (gage height, 15.36 ft or 4.682 m); minimum, 10 ft^3/s (0.28 m^3/s) Dec. 11, 1932, Aug. 15, 1939, Sept. 18, 1947.

REMARKS.--Records good. No storage or large diversion above station.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1965: 1964(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	45	37	50	260	144	284	224	70	37	31	33
2	27	35	41	47	502	220	244	205	67	37	28	36
3	27	33	155	45	217	233	227	207	64	37	30	39
4	27	32	334	44	344	195	227	208	60	37	31	41
5	27	32	92	43	217	176	236	193	58	37	28	41
6	27	31	62	86	187	199	217	181	56	34	31	37
7	27	37	52	131	344	647	207	170	55	32	30	35
8	28	52	46	331	1040	1340	252	163	57	35	34	33
9	29	36	43	171	1630	1350	252	158	54	34	27	34
10	29	34	41	116	1050	1030	259	153	53	34	25	37
11	28	33	40	90	502	675	265	149	51	35	27	41
12	28	32	41	74	1010	462	268	147	50	35	30	40
13	28	32	44	66	2650	370	268	146	49	34	33	35
14	28	32	40	60	1200	306	288	144	46	32	26	32
15	28	32	40	57	571	260	270	142	45	31	27	29
16	28	32	39	54	382	315	239	137	45	39	30	28
17	28	32	38	52	270	269	213	131	45	38	31	23
18	27	39	38	51	204	629	193	124	45	36	31	23
19	27	37	37	50	195	2010	182	120	45	35	33	26
20	28	35	37	49	259	1480	173	116	46	35	38	26
21	28	42	36	48	215	1120	167	111	43	32	31	25
22	28	60	38	47	183	824	166	104	42	33	39	25
23	28	42	36	45	161	570	164	98	41	29	37	25
24	28	37	35	45	147	575	393	93	43	30	28	23
25	29	39	35	43	141	1790	634	89	50	28	31	23
26	29	38	35	43	136	1250	462	85	42	28	26	25
27	31	36	114	43	131	795	375	82	40	28	28	28
28	50	35	175	41	135	550	315	78	39	28	29	30
29	40	35	80	43	---	431	274	75	40	29	30	29
30	33	36	62	40	---	365	247	72	38	30	31	24
31	47	---	54	50	---	327	---	68	---	31	34	---
TOTAL	925	1103	1997	2155	14283	20907	7961	4173	1479	1030	945	926
MEAN	29.8	36.8	64.4	69.5	510	674	265	135	49.3	33.2	30.5	30.9
MAX	50	60	334	331	2650	2010	634	224	70	39	39	41
MIN	27	31	35	40	131	144	164	68	38	28	25	23
AC-FT	1830	2190	3960	4270	28330	41470	15790	8280	2930	2040	1870	1840

CAL YR 1974 TOTAL 85571 MEAN 234 MAX 5300 MIN 27 AC-FT 169700
WTR YR 1975 TOTAL 57884 MEAN 159 MAX 2650 MIN 23 AC-FT 114800

Peak discharge (base, 1,600 ft^3/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-9	0400	6.89	2,230	3-19	1100	7.38	2,570
2-13	0900	8.76	3,570	3-25	0800	6.63	2,070

11384000 BIG CHICO CREEK NEAR CHICO, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water year 1953 (partial-record station), October 1953 to September 1968, water years 1969, 1975 (partial-record station).

REMARKS.--Chemical-quality records furnished by California Department of Water Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
MAR.										
20...	1115	1490	--	--	2.2	35	0	29	1.4	--
MAY										
02...	0945	203	40	0	4.2	52	0	43	2.6	.01

DATE	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAR.										
20...	--	--	29	0	.2	0	--	--	--	--
MAY										
02...	.10	.01	37	0	.3	0	0	0	0	10

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
NOV.							
15...	1300	32	218	8.4	11.0	0	9.4
JAN.							
13...	0830	66	158	7.6	6.0	1	12.2
MAR.							
20...	1115	1490	64	7.4	9.5	14	11.2
MAY							
02...	0945	203	95	7.8	12.5	0	10.7
JULY							
02...	1030	37	178	8.2	19.0	1	9.3
SEP.							
22...	1045	24	208	8.2	21.5	0	9.5

11384600 LITTLE STONY CREEK ABOVE EAST PARK RESERVOIR, NEAR LODOGA, CALIF.

LOCATION.--Lat 39°17'48", long 122°32'22", in NE¼SW¼, sec.28, T.17 N., R.6 W., Colusa County, on left bank 1.1 mi (1.8 km) upstream from county bridge on Lodoga-Stonyford Road, 1.4 mi (2.3 km) downstream from Frenzel Creek, and 2.8 mi (4.5 km) southwest of Lodoga.

DRAINAGE AREA.--45.6 mi^2 (118.1 km^2).

PERIOD OF RECORD.--September 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,300 ft (396 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 68.5 ft^3/s (1.940 m^3/s), 49,630 acre-ft/yr (61.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,380 ft^3/s (39.1 m^3/s) Feb. 12 (gage height, 7.49 ft or 2.283 m); minimum daily, 0.45 ft^3/s (0.013 m^3/s) Sept. 28.
Period of record: Maximum discharge, 4,000 ft^3/s (113 m^3/s) Jan. 23, 1970 (gage height, 11.39 ft or 3.472 m), from rating curve extended above 1,500 ft^3/s (42.5 m^3/s); no flow for several days during August and September 1972.

REMARKS.--Records good. No known storage or diversions above station.

REVISIONS (WATER YEARS).--WRD Calif. 1968: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.75	2.7	1.8	7.1	212	75	132	66	22	7.2	3.1	1.3
2	.75	2.0	10	6.4	162	90	119	65	22	7.3	2.9	1.3
3	.75	1.8	106	5.9	77	83	112	65	21	7.1	2.6	1.2
4	.75	1.8	46	7.2	140	77	107	64	19	6.9	2.4	1.0
5	1.1	1.6	13	7.4	65	80	100	61	19	6.8	2.2	.89
6	1.6	1.8	7.9	30	108	105	96	59	18	6.3	2.1	.76
7	1.5	2.0	6.0	25	241	622	89	58	17	5.9	2.0	.66
8	1.4	2.9	5.0	58	492	506	85	56	17	5.6	2.1	.60
9	1.3	2.1	4.3	31	644	355	79	55	16	5.3	1.9	.68
10	1.2	2.0	3.9	21	416	272	75	54	15	5.0	1.8	1.1
11	1.2	2.0	3.7	17	179	212	71	53	14	4.7	1.7	1.6
12	1.1	1.7	3.7	14	593	173	68	52	14	4.5	1.6	1.2
13	.84	1.7	3.7	12	854	150	66	52	13	4.3	1.5	.98
14	.84	1.6	3.4	11	393	131	66	52	12	4.3	1.5	.89
15	.95	1.7	3.5	10	220	127	64	51	11	5.1	1.6	.86
16	.95	1.7	3.4	9.2	147	132	63	50	11	6.9	1.6	.82
17	.95	1.6	3.3	8.5	110	233	60	47	11	5.8	1.6	.74
18	.95	1.7	3.1	8.0	90	654	57	45	11	5.3	2.3	.66
19	.95	1.7	3.1	7.5	138	518	55	44	11	5.0	3.5	.63
20	.84	1.7	3.1	7.2	143	357	53	42	11	4.7	3.0	.66
21	.84	2.2	3.1	6.9	110	530	52	40	10	4.4	2.2	.66
22	.95	3.0	3.1	6.6	94	459	52	38	9.7	3.9	2.2	.63
23	1.1	2.3	2.9	6.5	83	323	52	36	9.1	3.6	1.9	.57
24	1.2	2.2	3.0	6.3	77	328	95	34	9.3	3.4	1.6	.53
25	1.4	3.0	3.0	6.3	72	597	97	32	9.5	3.1	1.5	.49
26	1.4	2.5	3.1	6.1	67	382	85	30	9.1	2.9	1.4	.49
27	1.4	2.0	42	5.9	67	285	79	29	8.4	2.9	1.4	.47
28	4.5	1.8	42	5.8	70	222	74	27	7.9	3.1	1.7	.45
29	2.9	1.8	15	5.8	---	184	71	26	7.5	3.2	1.7	.46
30	2.2	1.8	11	5.6	---	163	68	24	7.2	3.6	1.4	.48
31	2.5	---	8.2	13	---	149	---	23	---	3.6	1.4	---
TOTAL	41.06	60.6	374.3	378.2	6064	8574	2342	1430	392.7	151.7	61.4	23.76
MEAN	1.32	2.02	12.1	12.2	217	277	78.1	46.1	13.1	4.89	1.98	.79
MAX	4.5	3.0	106	58	854	654	132	66	22	7.3	3.5	1.6
MIN	.75	1.6	1.8	5.6	65	75	52	23	7.2	2.9	1.4	.45
AC-FT	81	120	742	750	12030	17010	4650	2840	779	301	122	47

CAL YR 1974 TOTAL 29624.49 MEAN 81.2 MAX 2130 MIN .70 AC-FT 58760
WTR YR 1975 TOTAL 19893.72 MEAN 54.5 MAX 854 MIN .45 AC-FT 39460

Peak discharge (base, 1,000 ft^3/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-8	2100	7.34	1,310	3-7	1030	7.03	1,170
2-12	1730	7.49	1,380	3-21	1700	6.81	1,070

11384600 LITTLE STONY CREEK ABOVE EAST PARK RESERVOIR, NEAR LODOGA, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: May 1967 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 30.0°C July 21, 23-25; minimum, freezing point Jan. 28 to Feb. 1.
Period of record:
Water temperatures: Maximum, 33.5°C July 15, 1972; minimum, freezing point Dec. 21-23, 1968, Jan. 28 to Feb. 1, 1975.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.0	13.5	14.0	9.0	7.5	4.0	4.0	2.0	4.0	0.0	11.0	8.0
2	21.5	15.5	14.0	8.5	8.0	7.0	3.0	1.0	5.5	4.0	11.0	8.5
3	22.0	14.0	14.0	8.0	9.5	8.0	4.0	1.0	6.5	4.0	11.0	6.5
4	21.5	13.5	13.0	8.0	9.5	7.5	5.5	3.5	6.0	4.5	11.0	6.5
5	19.5	16.5	13.0	8.0	9.0	7.0	6.0	4.0	5.5	5.0	9.5	8.5
6	19.5	15.5	13.0	8.5	9.0	7.0	6.5	5.5	6.5	5.5	10.0	8.5
7	19.5	15.5	12.5	10.0	8.5	6.5	7.5	6.0	7.5	6.0	10.0	9.0
8	18.0	13.5	11.0	6.5	8.0	5.5	7.5	5.5	8.0	7.0	11.0	9.0
9	19.5	12.5	11.0	6.0	7.0	5.0	5.5	3.5	8.0	7.0	9.5	8.0
10	19.0	11.5	12.0	7.0	7.0	4.5	6.0	4.0	8.5	6.5	9.5	7.5
11	19.5	11.0	12.0	7.5	8.0	6.5	5.5	3.5	8.5	6.0	11.5	8.0
12	20.0	12.0	13.0	8.0	8.0	6.0	5.5	3.0	8.0	7.5	11.0	6.5
13	20.0	11.0	13.0	8.5	7.0	4.5	5.0	2.5	9.5	7.5	9.0	7.5
14	20.0	11.0	14.0	9.5	8.0	6.0	4.5	2.5	7.5	5.5	11.5	6.5
15	20.0	11.0	13.5	9.5	8.5	6.0	5.5	2.5	7.5	5.0	10.0	8.0
16	20.5	11.5	12.5	8.5	8.5	6.0	6.0	3.0	7.0	5.0	10.0	7.0
17	20.0	11.5	12.0	10.0	7.5	5.0	6.5	3.5	7.0	4.0	9.0	7.0
18	20.0	11.5	12.5	9.0	7.0	3.5	7.0	4.5	7.5	4.5	11.5	8.5
19	19.5	12.0	10.5	7.0	6.5	4.0	7.0	4.0	9.5	6.5	10.5	8.5
20	19.5	11.5	11.0	7.5	7.5	5.0	7.5	4.5	8.0	5.0	10.5	7.5
21	17.5	9.5	13.0	9.0	7.0	5.5	7.5	4.5	7.0	4.0	8.0	7.5
22	18.0	9.5	9.0	6.0	5.5	3.0	7.5	4.5	8.0	3.5	10.0	7.5
23	17.5	9.0	9.5	5.5	4.5	2.0	7.5	4.5	9.0	4.5	10.0	8.0
24	15.5	10.5	9.5	5.5	4.0	1.0	8.5	5.5	10.0	5.5	11.0	9.0
25	16.0	10.0	10.0	6.5	4.5	1.5	8.5	5.5	10.5	6.5	11.0	7.5
26	17.5	11.5	9.0	5.0	6.0	3.0	7.0	5.0	10.5	6.0	10.0	6.5
27	16.0	12.0	9.0	5.0	7.0	5.5	5.0	2.0	12.0	8.0	10.5	6.5
28	15.5	12.0	8.5	4.5	6.0	4.0	2.5	0.0	12.0	8.0	10.0	5.0
29	15.0	9.5	8.0	4.0	4.0	1.5	3.5	0.0	---	---	12.5	6.5
30	14.5	10.0	8.0	4.0	4.5	3.0	2.5	0.0	---	---	14.5	8.0
31	13.5	11.5	---	---	3.5	2.0	2.0	0.0	---	---	12.0	8.0
MONTH	22.0	9.0	14.0	4.0	9.5	1.0	8.5	0.0	12.0	0.0	14.5	5.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	6.0	15.5	8.5	25.0	18.0	24.0	14.0	27.0	17.5	24.0	17.0
2	12.5	6.5	17.0	9.0	24.0	17.5	25.0	15.5	27.5	18.0	24.0	16.5
3	11.0	8.0	14.5	11.0	23.5	17.0	25.0	16.5	28.0	19.5	24.0	16.5
4	11.5	7.0	12.5	6.5	25.0	17.0	22.5	16.0	28.0	20.0	24.5	17.0
5	10.5	6.5	15.0	6.5	26.0	18.0	25.5	15.5	27.5	20.0	25.0	18.0
6	11.0	7.0	16.5	8.0	26.0	19.5	26.5	16.5	26.0	18.0	25.0	18.0
7	9.5	6.5	18.0	9.5	24.5	20.5	27.0	20.5	25.0	16.5	25.5	19.0
8	10.0	7.5	18.5	10.5	24.5	20.5	28.0	21.5	26.5	17.5	25.0	19.0
9	13.5	6.0	17.0	11.0	24.5	18.0	29.0	22.0	26.5	18.5	21.5	19.5
10	12.5	7.0	16.0	10.5	25.5	16.5	28.0	19.5	27.0	19.5	20.0	18.0
11	14.5	8.0	18.0	10.0	26.0	24.0	29.0	26.5	27.0	20.0	24.0	17.0
12	15.0	8.0	18.5	10.5	27.0	24.5	29.0	24.0	27.0	20.0	24.5	18.0
13	14.0	8.5	20.0	11.0	27.5	19.0	29.5	20.0	27.0	20.0	25.0	18.5
14	13.5	8.5	19.5	12.0	28.0	19.0	29.0	21.0	27.0	20.5	24.5	18.0
15	10.0	8.0	18.0	11.5	27.5	18.5	22.5	21.0	27.0	20.5	24.0	18.5
16	10.0	5.5	19.5	11.0	27.0	18.5	28.5	20.0	26.5	20.0	24.0	17.5
17	14.0	5.5	20.0	11.0	25.0	18.0	27.5	21.0	23.5	19.5	23.5	17.0
18	14.0	7.0	21.0	12.5	23.5	16.0	28.5	21.0	22.5	20.0	23.0	18.5
19	16.0	10.0	19.5	13.0	22.5	16.5	29.5	20.5	24.0	19.0	23.5	19.5
20	16.0	8.5	17.0	10.0	25.5	16.5	29.5	21.0	25.5	18.0	24.0	19.5
21	16.5	9.5	18.0	10.5	26.0	16.5	30.0	21.0	25.0	18.5	23.5	20.0
22	14.0	8.0	19.0	11.5	26.0	18.0	29.5	21.0	25.5	18.5	22.5	18.0
23	11.5	9.5	21.0	13.0	24.5	17.5	30.0	20.5	25.5	18.5	23.0	19.0
24	12.5	10.0	21.5	13.5	21.0	15.0	30.0	20.5	26.5	19.5	22.5	18.0
25	12.0	7.0	20.0	12.5	23.5	14.0	30.0	20.5	26.5	20.5	22.5	18.0
26	14.0	6.0	20.5	12.5	25.0	15.0	29.5	20.5	26.0	20.0	22.0	18.0
27	15.0	7.5	21.5	14.0	25.0	16.0	29.0	20.0	23.0	19.0	21.0	17.0
28	15.0	8.0	21.5	14.5	25.5	16.0	29.0	21.5	22.5	17.5	20.0	16.0
29	15.5	7.5	23.0	15.0	25.5	16.5	27.0	20.5	23.5	16.0	19.5	15.5
30	15.0	9.0	24.0	15.5	25.5	16.0	27.0	19.0	24.0	16.5	20.0	16.0
31	---	---	24.5	17.0	---	---	26.5	18.5	24.0	17.5	---	---
MONTH	16.5	5.5	24.5	6.5	28.0	14.0	30.0	14.0	28.0	16.0	25.5	15.5

RESERVOIRS IN STONY CREEK BASIN, CALIF.

11385100 EAST PARK RESERVOIR NEAR STONYFORD.--Lat 39°21'24", long 122°30'53", in SW¼NE¼ sec.3, T.17 N., R.6 W., Colusa County, near south side of spillway section on East Park Dam on Little Stony Creek, 1.9 mi (3.1 km) southeast of Stonyford. Drainage area, 98.2 mi^2 (254.3 km^2). Period of record, October 1969 to current year. Nonrecording gage read once daily. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Extremes for current year: Maximum contents, 51,290 acre-ft (63.2 hm^3) Apr. 8 (elevation, 1,199.90 ft or 365.730 m); minimum, 1,070 acre-ft (1.32 hm^3) Sept. 30 (elevation, 1,140.68 ft or 347.679 m). Extremes for period of record: Maximum contents, 53,500 acre-ft (66.0 hm^3) Mar. 30, 1974 (elevation, 1,201.10 ft or 366.095 m); minimum, 280 acre-ft (345,000 m^3) Aug. 8 to Oct. 31, 1972 (elevation, 1,131.68 ft or 344.936 m).

Reservoir is formed by a concrete arch-type dam. Storage began in 1910. Capacity, 48,211 acre-ft (59.4 hm^3) between elevations 1,131.68 ft (344.936 m), invert of sluice pipe and 1,198.18 ft (365.205 m), crest of spillway. Capacity increased to 50,889 acre-ft (62.7 hm^3) with the addition of flashboards to an elevation of 1,199.68 ft (365.662 m). Dead storage, 279 acre-ft (344,000 m^3). Records of contents furnished by Bureau of Reclamation.

11386100 STONY GORGE RESERVOIR NEAR ELK CREEK.--Lat 39°35'09", long 122°31'54", in NE¼SE¼ sec.16, T.20 N., R.6 W., Glenn County, on south end of Stony Gorge Dam on Stony Creek, 1.3 mi (2.1 km) southeast of Elk Creek. Drainage area, 301 mi^2 (780 km^2). Period of record, October 1969 to current year. Nonrecording gage read once daily. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Extremes for current year: Maximum contents, 52,750 acre-ft (65.0 hm^3) Apr. 26 (elevation, 842.80 ft or 256.885 m); minimum, 10,030 acre-ft (12.4 hm^3) Oct. 1 (elevation, 795.65 ft or 242.514 m). Extremes for period of record: Maximum contents, 54,630 acre-ft (67.4 hm^3) Mar. 26, 1971 (elevation, 844.20 ft or 257.312 m); minimum, 3,810 acre-ft (4.70 hm^3) Nov. 6, 1971 (elevation, 779.20 ft or 237.500 m).

Reservoir is formed by slab and buttress-type dam. Storage began in 1928. Capacity, 50,383 acre-ft (62.1 hm^3) between elevations, 728.0 ft (221.89 m), top of low intake and 841.0 ft (256.34 m), crest of spillway. No dead storage. Records of contents furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
	East Park Reservoir			Stony Gorge Reservoir		
Sept. 30	1,175.64	17,940	--	795.54	9,980	--
Oct. 31	1,165.12	9,780	-8,160	800.32	12,540	+2,560
Nov. 30	1,162.98	8,490	-1,290	806.72	16,560	+4,020
Dec. 31	1,166.88	10,920	+2,430	813.60	21,640	+5,080
CAL YR 1974	--	--	-28,150	--	--	-17,820
Jan. 31	1,173.04	15,620	+4,700	818.96	26,190	+4,550
Feb. 28	1,194.70	42,320	+26,700	840.0	49,090	+22,900
Mar. 31	1,198.50	48,780	+6,460	841.16	50,590	+1,500
Apr. 30	1,199.86	51,220	+2,440	842.42	52,240	+1,650
May 31	1,199.66	50,850	-370	838.30	46,940	-5,300
June 30	1,199.04	49,740	-1,110	833.76	41,460	-5,480
July 31	1,197.48	46,990	-2,750	815.94	23,560	-17,900
Aug. 31	1,178.50	20,770	-26,220	813.60	21,640	-1,920
Sept. 30	1,140.68	1,070	-19,700	813.50	21,560	-80
WTR YR 1975	--	--	-16,870	--	--	+11,580

11387000 STONY CREEK NEAR FRUTO, CALIF.

LOCATION.--Lat 39°40'18", long 122°31'01", in SW¼SE¼ sec.15, T.21 N., R.6 W., Glenn County, on right bank 0.3 mi (0.5 km) downstream from Grindstone Creek, and 6.5 mi (10.5 km) northwest of Fruto.

DRAINAGE AREA.--597 mi^2 (1,546 km^2).

PERIOD OF RECORD.--January 1901 to October 1912, October 1960 to current year.

GAGE.--Water-stage recorder and two crest-stage gages. Altitude of gage is 600 ft (183 m), from topographic map. Prior to Oct. 6, 1912, nonrecording gage at site 1.0 mi (1.6 km) downstream at different datum.

AVERAGE DISCHARGE (unadjusted).--26 years, 683 ft^3/s (19.34 m^3/s), 494,800 acre-ft/yr (610 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 24,100 ft^3/s (683 m^3/s) Mar. 7 (gage height, 12.68 ft or 3.865 m); minimum daily, 9.5 ft^3/s (0.27 m^3/s) Nov. 7.

Period of record: Maximum discharge, 40,200 ft^3/s (1,140 m^3/s) Dec. 23, 1964 (gage height, 15.94 ft or 4.858 m in gage well, 16.1 ft or 4.91 m, from floodmarks); no flow July 5-13, Oct. 25, 26, 1901.

REMARKS.--Records fair. Many diversions above station for irrigation. Flow regulated by Stony Gorge Reservoir (see sta 11386100) 6.9 mi (11.1 km) upstream since 1928 and by East Park Reservoir (see sta 11385100) since 1910, combined usable capacity, 100,700 acre-ft (124 hm^3).

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	16	14	49	316	797	1550	934	649	156	502	412
2	123	14	40	45	710	991	1610	932	584	156	496	416
3	120	12	504	43	347	986	1300	953	526	245	490	421
4	122	11	423	61	408	958	1060	909	507	331	471	402
5	134	10	101	72	246	946	915	837	506	333	416	390
6	112	10	65	529	386	1110	926	772	459	333	416	385
7	72	9.5	51	312	658	12400	731	754	379	330	418	379
8	72	11	45	848	2030	6620	711	848	361	329	421	375
9	72	14	40	339	2260	3560	808	967	339	347	412	376
10	72	12	37	223	2350	2770	869	921	331	370	412	374
11	72	11	36	172	1090	2490	889	831	322	370	414	393
12	72	11	38	137	4850	2030	882	880	315	366	422	396
13	73	11	82	121	6690	1280	884	938	370	370	422	351
14	74	11	52	115	2600	884	920	988	418	385	421	313
15	74	11	55	107	1660	844	890	988	410	389	415	300
16	74	11	51	102	966	972	881	1090	400	413	420	299
17	74	11	44	94	668	1390	841	1220	392	422	419	298
18	74	11	41	92	612	6380	791	1220	386	398	433	290
19	74	12	37	88	1440	6020	754	1150	381	377	435	290
20	74	12	37	83	1930	2870	746	889	380	373	440	286
21	74	13	37	81	1390	6110	769	693	371	376	448	286
22	76	14	41	79	1110	4880	784	584	367	350	455	286
23	77	15	38	78	927	2940	782	547	288	357	460	279
24	106	15	34	74	790	2770	1200	549	190	357	448	268
25	158	14	33	72	661	8290	1570	552	157	374	434	207
26	159	20	33	72	573	3920	1380	531	154	390	412	107
27	163	18	222	70	594	2600	1260	574	151	386	390	67
28	180	16	260	66	709	2010	1120	639	148	385	395	67
29	182	15	87	64	---	2040	1030	642	144	429	401	67
30	127	15	63	61	---	2300	977	641	145	499	406	67
31	20	---	53	86	---	2050	---	647	---	502	412	---
TOTAL	3079	386.5	2694	4435	38971	96208	29830	25620	10530	11198	13356	8847
MEAN	99.3	12.9	86.9	143	1392	3103	994	826	351	361	431	295
MAX	182	20	504	848	6690	12400	1610	1220	649	502	502	421
MIN	20	9.5	14	43	246	797	711	531	144	156	390	67
AC-FT	6110	767	5340	8800	77300	190800	59170	50820	20890	22210	26490	17550

CAL YR 1974 TOTAL 321478.5 MEAN 881 MAX 25800 MIN 9.5 AC-FT 637700
WTR YR 1975 TOTAL 245154.5 MEAN 672 MAX 12400 MIN 9.5 AC-FT 486300

11387000 STONY CREEK NEAR FRUTO, CALIF.--Continued

PERIOD OF RECORD.--*Chemical analyses: March 1964 to September 1966.*
Water temperatures: December 1970 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 28.0°C July 23, 24; minimum, 5.0°C Feb. 2.
Period of record:
Water temperatures (1971-73, 1974 to current year): Maximum, 33.5°C Aug. 9, 1972; minimum, freezing point on several days in 1972 and 1973.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	15.0	14.5	9.5	9.5	6.5	6.5	7.0	5.5	8.0	7.5
2	---	---	14.5	14.0	9.5	9.5	6.5	6.5	5.5	5.0	8.0	8.0
3	---	---	---	---	9.5	9.0	6.5	6.5	6.0	5.5	8.0	8.0
4	---	---	---	---	9.5	9.0	6.5	6.5	6.0	6.0	8.0	8.0
5	---	---	---	---	9.5	9.0	6.5	6.5	6.5	6.0	8.5	8.0
6	---	---	---	---	9.5	9.0	---	---	7.0	6.5	8.5	8.5
7	---	---	---	---	9.5	9.5	7.0	6.5	7.0	7.0	8.5	8.0
8	---	---	---	---	9.5	9.0	7.0	7.0	---	---	9.0	7.5
9	---	---	---	---	9.5	9.0	7.5	7.0	8.0	7.0	8.0	7.0
10	18.0	17.5	---	---	9.0	9.0	7.0	7.0	7.5	7.5	8.5	7.5
11	18.0	17.5	---	---	9.0	9.0	7.0	7.0	7.5	7.0	8.5	7.5
12	18.0	17.0	---	---	9.0	9.0	7.0	7.0	7.0	6.5	8.5	7.5
13	17.5	17.0	---	---	9.0	8.5	7.0	7.0	7.5	6.0	8.5	8.5
14	17.5	17.0	13.5	13.5	9.0	8.5	7.0	7.0	7.0	5.5	8.5	8.5
15	17.5	17.0	14.0	13.5	9.0	9.0	7.0	7.0	6.5	6.0	9.0	9.0
16	17.5	16.5	13.5	13.5	9.0	9.0	7.0	7.0	7.0	6.5	9.0	9.0
17	17.5	17.0	13.5	13.0	9.0	9.0	7.0	7.0	6.5	6.0	9.0	9.0
18	17.5	16.5	13.5	13.0	9.0	8.5	7.5	7.0	6.5	6.0	10.0	9.0
19	17.5	17.0	13.0	13.0	8.5	8.5	7.5	7.5	6.5	6.5	10.5	9.0
20	17.0	16.5	12.5	12.5	8.5	8.5	7.5	7.5	6.5	6.5	10.5	9.0
21	17.0	15.5	12.5	12.5	8.5	8.5	8.0	7.5	6.5	6.5	10.0	9.0
22	16.0	15.5	12.5	12.0	8.5	8.0	8.0	8.0	6.5	6.5	11.0	9.0
23	16.0	15.0	12.0	11.5	8.0	7.5	8.0	8.0	6.5	6.5	10.5	9.5
24	16.0	15.0	11.5	11.0	7.5	7.0	8.5	8.0	6.5	6.5	10.5	10.0
25	15.5	15.5	11.0	11.0	7.0	7.0	8.5	8.5	7.0	6.5	11.0	9.0
26	15.5	15.5	11.0	10.5	7.0	7.0	8.5	8.5	7.0	7.0	11.0	9.0
27	15.5	15.5	10.5	10.0	7.5	7.0	8.5	8.0	7.5	7.0	11.0	9.0
28	15.5	15.5	10.0	10.0	7.5	7.0	8.0	7.5	7.5	7.5	10.0	9.0
29	15.5	15.0	10.0	9.5	7.0	6.5	7.5	7.0	---	---	11.0	10.0
30	15.0	15.0	10.0	9.5	6.5	6.5	7.0	6.5	---	---	11.5	11.0
31	15.0	15.0	---	---	7.0	6.5	7.0	6.5	---	---	11.5	11.5
MONTH	---	---	---	---	9.5	6.5	8.5	6.5	8.0	5.0	11.5	7.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	11.5	---	---	21.0	14.0	26.5	16.0	27.0	21.0	25.5	21.5
2	11.5	11.5	19.5	12.5	21.5	14.0	26.5	16.5	27.5	21.5	25.5	21.0
3	12.0	12.0	17.0	11.0	21.0	14.0	24.5	17.0	27.5	21.5	25.5	21.5
4	12.0	12.0	15.0	9.5	22.5	14.0	23.5	17.5	27.0	21.5	25.5	22.0
5	12.5	12.0	17.5	10.0	23.5	15.0	25.0	17.5	27.5	21.5	26.0	22.0
6	12.5	12.0	19.5	11.5	23.5	15.0	25.5	18.0	26.5	21.0	26.0	22.5
7	12.5	12.5	20.5	13.0	24.5	16.0	26.0	18.0	26.0	20.5	26.0	23.0
8	12.5	12.5	21.5	14.0	23.0	15.0	26.5	19.0	27.0	20.5	26.0	23.5
9	12.5	12.5	18.0	13.0	23.5	14.5	26.0	19.0	26.5	20.5	25.0	24.0
10	13.0	13.0	18.5	12.5	24.5	15.0	25.5	19.5	27.0	20.5	24.5	23.5
11	13.5	13.5	18.5	11.5	25.0	15.5	26.0	19.5	26.5	21.0	26.0	24.0
12	14.0	14.0	18.0	11.5	26.0	16.0	26.5	20.0	26.5	21.0	26.5	24.0
13	14.5	14.0	18.5	11.5	24.0	16.5	26.5	20.0	26.0	21.0	26.5	24.5
14	14.5	14.5	17.5	12.0	24.5	16.5	26.5	20.5	26.0	21.0	26.5	24.5
15	15.0	15.0	17.0	11.5	24.0	16.5	22.0	20.5	26.0	21.0	26.5	24.5
16	15.0	15.0	16.0	11.0	24.0	16.5	26.5	20.5	25.5	20.5	26.5	24.5
17	15.5	15.0	16.5	11.0	23.5	16.0	26.5	21.0	23.5	21.0	26.0	21.0
18	15.5	15.5	16.5	11.0	23.5	15.5	26.5	20.5	24.0	20.5	26.0	20.5
19	16.0	16.0	17.0	11.0	22.0	16.0	27.0	20.5	25.0	21.0	26.5	20.0
20	16.5	16.0	15.5	9.5	24.0	16.5	27.0	21.0	25.5	20.5	27.0	20.5
21	17.0	16.5	18.5	10.5	24.5	16.5	27.5	21.0	25.0	20.5	26.0	20.5
22	---	---	19.0	11.0	24.5	17.0	27.5	20.5	26.0	20.5	26.5	20.0
23	---	---	20.5	12.0	25.0	17.0	28.0	21.0	25.5	20.5	26.5	20.5
24	---	---	20.5	12.0	22.5	15.0	28.0	21.0	26.0	20.5	26.5	20.0
25	---	---	19.5	11.5	25.5	14.5	27.5	20.5	25.5	21.0	27.0	20.0
26	---	---	21.0	12.0	27.0	16.0	27.5	21.0	25.5	21.0	26.0	19.0
27	---	---	20.0	12.5	27.0	16.0	27.5	21.0	24.0	20.5	25.0	17.5
28	---	---	19.5	12.5	27.5	16.5	27.5	21.5	25.5	20.5	24.5	16.5
29	---	---	20.5	13.0	27.0	16.5	26.5	21.5	25.5	20.5	24.5	16.5
30	---	---	21.5	13.5	25.0	16.5	26.0	21.5	25.5	21.0	25.0	17.5
31	---	---	21.5	14.0	---	---	26.0	21.0	25.5	21.0	---	---
MONTH	---	---	21.5	9.5	27.5	14.0	28.0	16.0	27.5	20.5	27.0	16.5

11387990 SOUTH DIVERSION CANAL NEAR ORLAND, CALIF.

LOCATION.--Lat 39°48'36", long 122°19'45", in SE¼NE¼ sec.32, T.23 N., R.4 W., Tehama County, on left bank 0.4 mi (0.6 km) downstream from Black Butte Dam, and 8.2 mi (13.2 km) northwest of Orland.

PERIOD OF RECORD.--July 1955 to current year. Prior to October 1961, published as an adjustment to Stony Creek at Black Butte damsite, near Orland.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 372.64 ft (113.581 m) above mean sea level. Prior to Oct. 23, 1956, at site 0.5 mi (0.8 km) upstream at different datum. Oct. 23, 1956, to Sept. 30, 1960, at present site and datum. Oct. 1, 1960, to Sept. 30, 1961, at datum 1.00 ft (0.305 m) lower.

AVERAGE DISCHARGE.--20 years, 109 ft³/s (3.087 m³/s), 78,970 acre-ft/yr (96.1 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 320 ft³/s (9.06 m³/s) May 8, 1969; no flow at times in most years.

REMARKS.--Records good. Canal diverts from Black Butte Lake at right end of Black Butte Dam; water is used for irrigation. A pump with a capacity of 6 ft³/s (0.17 m³/s) diverted water at times above station and was included in the canal record prior to Mar. 1, 1970. Total diverted during the current year was 979 acre-ft (1.21 hm³).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166	.30	1.9	1.1	5.2	3.2	.20	214	212	245	159	254
2	150	.30	2.1	1.1	1.5	3.2	.20	256	182	224	170	240
3	165	.30	8.3	1.3	1.1	1.6	.10	274	206	237	188	222
4	171	.30	3.0	1.1	2.3	.20	34	264	220	220	232	212
5	210	.20	.30	1.1	2.8	.20	74	254	256	212	254	212
6	195	1.3	.20	1.1	3.0	.20	89	235	245	236	247	211
7	185	3.2	.30	1.1	4.0	1.1	89	218	249	244	257	211
8	188	2.7	.30	1.1	6.4	.30	63	206	248	244	251	226
9	124	2.0	.30	1.1	3.5	.20	48	164	213	244	252	223
10	94	2.2	.30	1.3	3.0	1.0	48	173	231	241	265	220
11	107	2.3	.10	1.3	2.8	.20	48	166	251	252	258	198
12	133	2.2	.10	1.3	3.0	.10	48	151	257	259	239	210
13	141	2.1	.10	1.3	1.1	.10	48	199	234	248	210	223
14	140	2.1	.10	1.3	.60	.10	94	264	235	251	196	209
15	159	2.1	.10	1.3	.40	.30	123	270	215	265	211	208
16	137	2.1	.10	1.3	.60	.30	139	284	199	234	250	215
17	162	2.1	.10	1.3	1.0	.40	176	291	211	219	228	209
18	176	2.1	.10	1.3	3.2	.40	222	266	242	221	226	192
19	165	2.1	.10	1.1	3.5	.30	245	227	238	217	223	175
20	149	2.1	.10	1.1	2.8	.30	242	203	212	206	193	166
21	148	2.3	.10	1.1	2.5	1.8	245	181	245	206	228	151
22	155	2.3	.10	1.3	2.5	.30	230	180	233	240	232	149
23	152	2.3	.10	1.5	2.5	.20	197	176	248	258	216	176
24	117	2.3	.20	1.1	2.8	.40	151	163	258	255	194	219
25	133	2.3	.20	1.1	3.5	.40	130	190	247	272	196	250
26	129	2.3	.20	1.1	3.5	.10	125	241	220	276	211	236
27	98	2.3	.50	1.1	3.5	.20	123	259	205	272	209	227
28	66	2.1	6.3	1.0	3.5	.30	151	248	235	273	217	197
29	16	2.3	3.4	1.0	---	.30	167	265	256	272	239	184
30	.40	2.9	1.7	1.0	---	.30	194	282	242	256	251	189
31	.40	---	1.1	1.9	---	.20	---	262	---	213	255	---
TOTAL	4131.80	57.50	31.90	37.2	76.10	18.20	3543.50	7026	6945	7512	6957	6214
MEAN	133	1.92	1.03	1.20	2.72	.59	118	227	232	242	224	207
MAX	210	3.2	8.3	1.9	6.4	3.2	245	291	258	276	265	254
MIN	.40	.20	.10	1.0	.40	.10	.10	151	182	206	159	149
AC-FT	8200	114	63	74	151	36	7030	13940	13780	14900	13800	12330

CAL YR 1974 TOTAL 44874.80 MEAN 123 MAX 313 MIN .10 AC-FT 89010
WTR YR 1975 TOTAL 42550.20 MEAN 117 MAX 291 MIN .10 AC-FT 84400

11387995 BLACK BUTTE LAKE NEAR ORLAND, CALIF.

LOCATION.--Lat 39°48'50", long 122°20'12", in SE¼SW¼ sec.29, T.23 N., R.4 W., Tehama County, in control tower in right abutment of main dam on Stony Creek, 8 mi (13 km) northwest of Orland.

DRAINAGE AREA.--736 mi² (1,906 km²).

PERIOD OF RECORD.--October 1963 to current year. Prior to October 1971, published as Black Butte Reservoir near Orland.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 119,047 acre-ft (147 hm³) Apr. 30 (elevation, 463.59 ft or 141.302 m); minimum, 22,923 acre-ft (28.3 hm³) Oct. 26 (elevation, 426.26 ft or 129.924 m).

Period of record: Maximum contents, 149,700 acre-ft (185 hm³) June 8, 9, 1967 (elevation, 471.19 ft or 143.619 m); minimum since initial season of operation, 9,420 acre-ft (11.6 hm³) Oct. 27, 1964 (elevation, 413.83 ft or 126.135 m).

REMARKS.--Reservoir is formed by seven earthfill dams; storage began Oct. 28, 1963. Usable capacity, 150,000 acre-ft (185 hm³) between elevations 414.6 ft (126.37 m), minimum operating level and 473.5 ft (144.32 m), spillway crest, above mean sea level. Additional storage of 10,000 acre-ft (12.3 hm³) is not available for release. South Diversion Canal (see sta 11397990) diverts at right end of dam. Water is released down Stony Creek for irrigation. Records, including extremes, represent total contents at 2400 hours.

COOPERATION.--Records of contents furnished by Corps of Engineers, not rounded to Geological Survey standards.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

413	8,811	450	73,660
415	10,300	460	105,925
420	14,950	470	144,621
430	28,788	480	191,348
440	48,072		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34373	24354	23543	30364	40029	71160	90944	118859	114463	89358	60100	44787
2	33917	24384	23796	30416	42389	72839	93895	118633	114463	87851	59490	44639
3	33519	24475	25352	30433	43567	74751	95993	118370	114057	86642	58883	44639
4	33033	24536	27111	30450	44702	76447	97643	118070	113653	85693	58156	44639
5	32515	24582	27484	30571	45446	77739	98628	117771	113285	84876	57262	44660
6	32107	24674	27663	31422	46564	78010	99515	117359	112845	83905	56377	44702
7	31562	24750	27728	32409	48915	91302	100063	116948	112223	83002	55428	44681
8	30986	24735	27810	33954	53702	93531	100476	116613	111421	81980	54537	44596
9	30692	24719	27827	34831	61464	91530	100958	116762	110731	80964	53608	44533
10	30296	24689	27843	35367	67300	86959	101753	116538	110079	80045	52712	44406
11	29858	24643	27843	35758	70473	80933	103424	116278	109321	79070	51850	44449
12	29393	24597	27860	36057	76418	77227	105005	116204	108673	78131	50974	44406
13	28905	24551	27925	36320	80841	72898	106457	116092	107992	77167	50107	44406
14	28421	24490	27975	36508	77889	87798	108242	115869	107205	76238	49318	44280
15	27892	24445	28008	36697	74426	63509	109717	115684	106457	75463	48515	44154
16	27337	24384	28057	36848	71563	60638	110912	115610	105783	74574	47588	44028
17	26789	24339	28073	37000	68860	61490	111822	115758	104970	73836	46898	43881
18	26262	24278	28073	37114	65955	67051	112662	116055	104055	72985	46175	43735
19	25758	24217	28073	37228	65033	72054	113249	116029	103250	72112	45446	43651
20	25243	24172	28057	37324	64657	72722	113984	116129	102482	71189	44956	43610
21	24750	24127	28057	37419	62981	80045	114610	116315	101649	70330	44999	43568
22	24323	24051	28024	37515	62848	79984	114943	116352	100820	69338	45105	43505
23	23796	23991	28008	37611	63589	79344	114610	116352	99823	68327	45233	43360
24	23409	23931	27991	37687	64576	79831	115202	116092	98628	67244	45382	43028
25	23128	23856	27975	37764	65928	85127	116650	115981	97440	66146	45531	42636
26	22923	23826	27975	37803	67134	86072	117583	115647	96094	65114	45574	42121
27	23011	23721	28621	37822	68327	86167	118295	115276	94824	64094	45489	41270
28	23172	23677	29749	37880	69649	86642	118783	115017	93465	63033	45425	40607
29	23587	23647	30090	37918	---	87245	118972	114869	91954	62167	45233	39969
30	24066	23587	30193	37957	---	88490	119047	114647	90651	61412	45062	39338
31	24278	---	30296	38324	---	89842	---	114537	---	60690	44871	---
MAX	34373	24750	30296	38324	80841	93531	119047	118859	114463	89358	60100	44787
MIN	22923	23587	23543	30364	40029	60638	90944	114537	90651	60690	44871	39338
(a)	427.17	426.71	430.89	435.29	448.61	455.28	463.59	462.38	455.50	445.29	438.56	435.81
(b)	-10,572	-691	+6,709	+8,028	+31,325	+20,193	+29,205	-4,510	-23,886	-29,961	-15,819	-5,533
(c)	1,010	337	237	261	352	651	1,167	2,648	2,884	2,364	1,825	1,430

CAL YR 1974 b -43,923
WTR YR 1975 b +4,448

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11388000 STONY CREEK BELOW BLACK BUTTE DAM, NEAR ORLAND, CALIF.

LOCATION.--Lat 39°49'07", long 122°19'26", in NW¼SW¼ sec.28, T.23 N., R.4 W., Tehama County, on left bank 200 ft (61 m) downstream from road bridge, 0.6 mi (1.0 km) downstream from Black Butte Dam, 8.1 mi (13.0 km) northwest of Orland.

DRAINAGE AREA.--737 mi² (1,909 km²).

PERIOD OF RECORD.--July 1955 to current year. Prior to October 1962, published as Stony Creek at Black Butte damsite, near Orland.

GAGE.--Water-stage recorder and grouted rock control. Datum of gage is 366.02 ft (111.563 m) above mean sea level (levels by Corps of Engineers). Prior to Dec. 12, 1960, water-stage recorder at site 0.6 mi (1.0 km) upstream at different datum. Dec. 12, 1960, to Nov. 30, 1963, nonrecording gage at bridge 200 ft (61 m) upstream at datum 4.04 ft (1.231 m) higher.

AVERAGE DISCHARGE (adjusted for diversion to South Diversion Canal since 1956 and for change in contents in and evaporation from Black Butte Lake since 1964).--20 years, 668 ft³/s (18.92 m³/s), 484,000 acre-ft/yr (597 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,050 ft³/s (200 m³/s) Mar. 8, 9 (gage height, 8.10 ft or 2.469 m); no flow Nov. 2-7.

Period of record: Maximum discharge, 36,300 ft³/s (1,030 m³/s) Feb. 24, 1958 (gage height, 11.82 ft or 3.603 m, site and datum then in use), from rating curve extended above 7,500 ft³/s (212 m³/s) on basis of slope-area measurement of maximum flow; no flow Dec. 8-10, 31, 1956, Jan. 1-10, 1957, Oct. 19 to Nov. 7, Nov. 13-15, 1962. Maximum discharge since construction of Black Butte Dam in 1964, 19,400 ft³/s (549 m³/s) Dec. 25, 1964 (gage height, 10.41 ft or 3.174 m); no flow at times in each year.

REMARKS.--Records good. Many diversions above station for irrigation. Flow regulated by Black Butte Lake (see sta 11387995), East Park Reservoir (see sta 11385100), usable capacity, 50,900 acre-ft (62.8 hm³), and Stony Gorge Reservoir (see sta 11386100), usable capacity, 50,400 acre-ft (62.1 hm³). Prior to October 1956, figures of daily discharge included water diverted to South Diversion Canal, which diverts 0.6 mi (1.0 km) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	.10	31	34	34	48	1260	739	438	534	540	188
2	144	0	34	34	33	48	473	745	437	535	522	190
3	125	0	37	34	33	49	254	754	442	514	520	176
4	113	0	35	34	30	50	469	749	438	500	525	145
5	112	0	35	34	28	165	487	741	428	498	510	136
6	109	0	35	34	28	827	521	724	426	495	512	136
7	109	0	35	34	29	3240	542	711	426	507	515	159
8	111	28	35	34	30	7020	535	708	427	520	509	173
9	101	28	34	35	34	6200	522	730	426	532	509	181
10	115	30	34	35	32	6470	497	739	418	535	513	184
11	116	30	34	35	32	5990	109	732	415	535	526	170
12	116	30	34	35	1250	4240	83	730	415	527	533	165
13	118	30	34	35	4960	3940	79	731	450	519	534	164
14	118	30	34	35	5610	3700	81	730	528	512	529	161
15	122	30	34	35	4280	3230	85	722	530	510	523	149
16	136	30	34	35	3000	2730	153	719	524	498	519	145
17	125	30	34	35	2500	1610	176	708	527	497	512	145
18	107	30	34	34	2340	2790	188	706	530	504	519	145
19	101	30	34	33	2020	3830	186	708	533	509	520	140
20	101	30	34	33	2530	3890	186	634	528	516	444	135
21	95	31	34	33	2570	3490	186	398	515	521	161	147
22	91	31	34	33	1390	6580	308	389	521	519	155	157
23	110	31	34	33	728	4570	705	397	522	524	152	176
24	123	31	34	33	438	3720	694	414	510	529	150	180
25	113	31	34	33	175	4490	690	429	482	534	141	170
26	110	31	34	32	49	4950	692	428	497	526	162	164
27	107	31	34	32	44	3730	681	426	516	522	176	162
28	84	31	34	32	48	2400	700	431	523	522	183	158
29	24	31	34	32	---	2000	720	435	531	522	196	157
30	.50	31	34	32	---	1720	736	436	531	522	199	152
31	.40	---	34	33	---	1580	---	436	---	528	192	---
TOTAL	3207.90	696.10	1059	1045	34267	99297	12998	19079	14434	16066	12201	4810
MEAN	103	23.2	34.2	33.7	1224	3203	433	615	481	518	394	160
MAX	151	31	37	35	5610	7020	1260	754	533	535	540	190
MIN	.40	0	31	32	28	48	79	389	415	495	141	135
AC-FT	6360	1380	2100	2070	67970	197000	25770	37840	28630	31870	24200	9540
MEAN a	81.3	19.2	148	170	1,797	3,544	1,062	812	360	312	390	298
AC-FT a	5,000	1,140	9,110	10,430	99,800	217,900	63,170	49,920	21,410	19,170	24,010	17,760

CAL YR 1974 TOTAL 303493.50 MEAN 831 MAX 12600 MIN 0 AC-FT 602000 MEAN a 915 AC-FT a 662,100
WTR YR 1975 TOTAL 219152.00 MEAN 600 MAX 7020 MIN 0 AC-FT 434700 MEAN a 744 AC-FT a 53,800

a Adjusted for diversion to South Diversion Canal near Orland and for change in contents in and evaporation from Black Butte Lake.

11388000 STONY CREEK BELOW BLACK BUTTE DAM, NEAR ORLAND, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1969, water years 1970 to current year (partial-record station). Published as "at damsite" in 1959-64.
Water temperatures: June 1969 to current year.
Sediment records: Water years 1958-62 (partial-record station).

EXTREMES.--Current year:
Water temperatures: Minimum, 4.0°C Dec. 29, 31, Jan. 2, 3.
Period of record:
Water temperatures: Maximum (1969-72, 1973-74), 29.0°C (recorded), July 29, 1971; minimum (1971 to current year), 3.5°C Jan. 3, 4, Feb. 2, Dec. 9, 1972, Jan. 10, 1974.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. Temperature probe above water level Oct. 29 to Nov. 9.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
JAN. 16...	1355	35	--	--	16	176	2	148	20	.21
MAY 20...	1120	670	640	20	9.0	118	0	97	8.0	.02

DATE	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JAN. 16...	--	--	171	23	.5	200	--	--	--	--
MAY 20...	.10	.04	107	10	.4	100	0	20	0	20

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)
NOV. 15...	1245	29	398	8.3	14.5	113	13.6
JAN. 16...	1355	35	347	8.4	6.0	18	14.5
MAR. 06...	1230	1010	279	7.9	9.0	62	11.3
MAY 20...	1120	670	250	8.0	16.0	6	10.8
JULY 23...	1130	530	269	7.6	25.0	33	9.0
SEP. 19...	1205	140	320	8.0	25.0	56	8.7

11388000 STONY CREEK BELOW BLACK BUTTE DAM, NEAR ORLAND, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.5	20.5	---	---	12.0	8.0	8.0	4.5	7.0	5.5	10.5	8.0
2	23.0	21.0	---	---	10.0	9.5	7.5	4.0	9.5	5.5	13.5	8.0
3	23.5	20.5	---	---	12.5	9.5	7.0	4.0	8.5	5.5	11.5	7.5
4	22.0	19.5	---	---	12.5	8.5	7.5	4.5	10.5	5.5	11.5	7.5
5	21.5	18.5	---	---	10.5	9.0	6.0	5.0	7.0	6.0	9.0	8.5
6	21.0	18.0	---	---	10.5	8.5	6.5	5.5	7.0	6.5	9.5	8.5
7	20.5	18.0	---	---	11.5	8.5	7.0	5.5	7.5	6.5	10.5	9.5
8	20.0	18.0	---	---	12.0	8.0	8.0	5.0	8.0	7.0	11.0	10.5
9	21.0	18.0	---	---	11.5	8.0	7.0	4.5	9.5	7.0	11.0	10.5
10	20.5	17.5	15.5	10.5	9.5	8.0	7.5	5.5	11.5	6.5	11.0	10.5
11	20.0	17.5	15.0	10.0	9.5	8.5	8.0	5.0	11.5	7.0	11.0	10.5
12	20.0	17.5	14.5	10.0	9.0	8.5	8.5	5.0	8.0	7.5	11.0	10.5
13	20.0	17.5	15.5	10.5	11.0	8.0	8.5	5.0	8.5	7.5	11.0	10.5
14	20.0	17.5	15.0	11.0	9.5	8.5	9.0	5.0	8.5	8.0	11.5	10.5
15	20.0	17.0	15.0	11.0	11.5	8.0	8.0	5.0	8.5	8.0	11.0	10.5
16	19.5	17.0	12.0	11.5	9.5	8.0	8.5	5.0	8.5	7.5	11.0	10.5
17	19.5	17.5	14.0	11.5	10.5	7.5	8.5	5.5	8.5	8.0	11.0	10.5
18	20.0	17.0	14.5	11.0	10.5	7.0	9.5	5.5	8.0	8.0	11.0	10.5
19	19.0	16.5	14.0	10.0	8.5	6.5	9.0	6.0	8.0	8.0	11.0	10.5
20	19.5	15.5	13.0	10.0	9.0	7.5	10.0	6.0	8.5	8.0	11.5	10.5
21	17.5	14.5	14.0	10.5	8.5	7.0	10.0	5.5	8.5	7.5	10.5	10.0
22	18.0	14.5	13.5	9.0	10.0	5.5	10.0	6.0	8.5	7.5	11.0	10.0
23	17.0	14.5	14.0	9.0	8.5	5.0	10.5	6.0	8.5	7.5	10.0	9.5
24	17.0	15.0	13.5	9.0	9.0	5.0	11.0	6.5	9.5	7.5	10.0	10.0
25	17.0	15.0	13.0	10.0	9.0	5.0	10.0	6.5	11.5	7.5	10.5	10.0
26	17.0	15.0	13.5	8.5	8.0	5.5	9.0	6.5	11.0	7.5	10.0	9.5
27	16.0	15.0	12.5	8.5	7.0	6.0	8.5	4.5	11.5	8.0	10.0	9.0
28	17.0	14.0	12.0	8.5	7.5	4.5	8.5	4.5	11.5	7.5	10.0	9.0
29	---	---	13.0	8.0	8.0	4.0	9.0	5.0	---	---	10.5	9.0
30	---	---	12.5	8.0	7.5	4.5	8.0	5.0	---	---	10.5	9.0
31	---	---	---	---	7.0	4.0	5.5	4.5	---	---	10.0	9.0
MONTH	23.5	14.0	---	---	12.5	4.0	11.0	4.0	11.5	5.5	13.5	7.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.0	13.5	13.0	---	---	21.5	20.5	---	---	24.5	22.0
2	12.5	9.5	13.5	12.5	---	---	22.0	20.5	---	---	24.5	22.0
3	11.0	10.0	14.0	12.5	---	---	22.0	20.5	---	---	25.0	22.0
4	10.5	10.0	14.0	13.0	---	---	22.0	20.5	---	---	25.5	22.0
5	10.5	10.0	14.5	13.0	---	---	22.0	20.5	---	---	25.5	22.0
6	11.0	10.0	14.5	13.5	---	---	22.0	20.5	---	---	25.5	22.0
7	10.5	10.0	14.5	13.5	---	---	22.0	21.0	---	---	25.0	22.0
8	10.5	10.0	14.5	13.5	---	---	22.0	20.5	---	---	25.0	22.0
9	11.0	10.0	14.5	13.5	---	---	22.0	21.0	---	---	24.5	22.5
10	11.5	10.0	14.5	13.5	---	---	22.0	21.0	---	---	23.0	22.5
11	13.5	10.0	15.0	13.5	---	---	22.5	21.0	---	---	25.0	22.5
12	14.0	9.5	15.0	14.0	---	---	22.5	21.0	---	---	25.0	22.0
13	15.0	10.0	15.5	14.0	---	---	22.5	21.5	---	---	24.5	22.0
14	12.5	10.0	15.5	14.0	---	---	22.5	21.5	---	---	24.5	22.0
15	14.0	9.5	15.5	14.0	---	---	23.0	21.5	---	---	25.0	22.0
16	12.5	10.0	15.5	14.5	---	---	23.0	21.5	---	---	24.5	22.0
17	13.0	10.0	16.0	14.5	---	---	23.0	21.5	---	---	24.5	22.0
18	13.5	10.0	16.0	15.0	---	---	23.0	21.5	---	---	24.5	22.0
19	12.5	10.5	16.0	15.0	---	---	23.5	22.0	---	---	24.5	22.0
20	12.5	10.5	16.0	15.0	---	---	---	---	---	---	25.0	22.0
21	14.5	10.5	17.0	15.5	---	---	---	---	---	---	24.5	22.0
22	13.5	10.5	17.0	15.5	---	---	---	---	---	---	24.5	22.0
23	11.5	11.0	17.5	15.5	---	---	23.5	22.5	---	---	24.0	22.0
24	13.0	11.0	17.5	16.0	---	---	23.5	22.5	---	---	24.5	22.0
25	13.0	11.5	18.0	16.0	21.5	20.0	---	---	---	---	24.5	22.0
26	13.0	11.5	18.0	16.5	21.5	20.0	---	---	---	---	24.5	22.0
27	13.0	12.0	18.0	16.5	21.5	20.0	---	---	24.0	23.0	24.5	22.0
28	13.0	12.0	18.0	17.0	21.5	20.0	---	---	25.0	22.5	24.5	22.0
29	13.5	12.5	18.5	17.5	21.5	20.0	---	---	24.5	22.5	24.5	22.0
30	13.5	12.5	---	---	21.5	20.5	---	---	25.0	22.0	24.5	21.5
31	---	---	---	---	---	---	---	---	24.5	22.5	---	---
MONTH	15.0	9.0	18.5	12.5	---	---	---	---	---	---	25.5	21.5

11389000 SACRAMENTO RIVER AT BUTTE CITY, CALIF.

LOCATION.--Lat 39°27'28", long 121°59'35", in SE¼NE¼ sec.32, T.19 N., R.1 W., Glenn County, on left bank 100 ft (30 m) upstream from highway bridge, 0.5 mi (0.8 km) south of Butte City, and at mile 115.8 (186.3 km) upstream from Sacramento.

DRAINAGE AREA.--12,081 mi^3 (31,290 km^2).

PERIOD OF RECORD.--April 1921 to September 1938 (low-water periods only), October 1938 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 2.92 ft (0.890 m) below mean sea level. Prior to December 1930, at site 0.5 mi (0.8 km) upstream at same datum.

AVERAGE DISCHARGE.--37 years (1938-75), 13,510 ft^3/s (382.6 m^3/s), 9,788,000 acre-ft/yr (12.1 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 91,000 ft^3/s (2,580 m^3/s) Feb. 14 (gage height, 90.62 ft or 27.621 m); minimum daily, 7,940 ft^3/s (225 m^3/s) Jan. 30, 31, Sept. 8.

Period of record: Maximum discharge (1940 to current year), 170,000 ft^3/s (4,810 m^3/s) Feb. 7, 1942 (gage height, 96.87 ft or 29.526 m); minimum recorded, 1,050 ft^3/s (29.7 m^3/s) July 15, 25, 26, 1931 (gage height, 67.49 ft or 20.571 m).

REMARKS.--Records good. Natural flow affected by storage reservoirs, power developments, diversions for irrigation and return flow from irrigated areas. During floods, overbank flow into Butte basin occurs upstream from the left (east) bank levee. The combined overbank flow and tributary runoff then flows south on the east bank floodplain into the Butte Sink and Sutter Bypass. Maximum overbank flood flows at the latitude of Butte City are as follows: Current year (Butte Creek at State Highway 162): Maximum discharge, 7,120 ft^3/s (202 m^3/s) Feb. 13 (gage height, 80.4 ft or 24.51 m). Period of record (1970 to current year): Maximum discharge, 17,200 ft^3/s (487 m^3/s) Jan. 24, 1970 (gage height, 82.0 ft or 24.99 m). REVISION.--The maximum discharge for Butte Creek at State Highway 162 for the water year 1974 has been revised to 15,000 ft^3/s (425 m^3/s) Mar. 30, 1974 (gage height, 82.0 ft or 24.99 m), superseding figure published in WRD Calif. 1974. Combined overbank flow.--Current year: Maximum discharge, 7,120 ft^3/s (202 m^3/s) Feb. 13. Period of record (1970 to current year): Maximum discharge, 74,300 ft^3/s (2,100 m^3/s) Jan. 25, 1970.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8340	11800	11600	8730	9860	14600	22700	16700	14800	10800	9950	10400
2	8320	11300	11600	8450	22900	14700	20500	16900	14800	10700	9750	10500
3	8290	10200	12400	8300	20500	15200	18600	16800	14700	10600	9630	10600
4	8420	9270	24200	8180	14600	14800	17700	18100	14400	10500	9630	10100
5	8430	8550	20000	8110	15500	14200	18600	18100	14500	10500	9620	9470
6	8430	8120	14100	8230	14000	14100	20100	17600	14700	10500	9600	8740
7	8410	8040	12900	12900	18400	16300	19100	17600	15000	10500	9590	8090
8	8360	8380	12400	14100	31500	48900	18300	17400	14700	10400	9520	7940
9	8320	9400	12200	17700	43700	56300	19500	17500	14400	10300	9550	7960
10	8380	10700	12000	12300	44800	50600	18000	17700	14000	10200	9570	8000
11	8380	11400	11900	10700	28000	46100	17100	18000	13800	10100	9640	8240
12	8360	11400	11900	9760	22300	38700	16200	18100	13700	10100	9840	8380
13	8290	11500	11900	9270	54800	33600	16700	18100	13600	10100	9890	8440
14	8360	11600	12000	9000	84700	31700	16900	18300	13500	10000	9740	8400
15	8400	11500	12000	8790	58500	30400	18300	18900	13400	10000	9760	8440
16	8420	11600	11900	8650	37000	28800	16700	19100	13400	10000	9780	8470
17	8320	11600	11800	8490	31000	29900	15000	18800	13400	10200	9820	8460
18	8360	11600	11400	8370	28200	33200	14900	18600	13300	10300	10100	8460
19	8320	11600	10400	8330	25200	56500	14600	18700	13000	10200	10400	8510
20	8790	11600	9890	8270	28000	73500	14700	18600	12600	10100	10800	8560
21	9700	11600	9790	8220	29200	67600	14200	17400	12200	9980	10500	8610
22	10100	11700	9680	8170	25100	74600	13500	16400	11800	9950	10300	8660
23	10200	11800	9570	8120	22800	77500	13600	16100	11500	9850	10200	8650
24	9380	11700	9460	8040	21500	58700	14000	15500	11200	9700	10100	8610
25	8590	11700	9410	8070	20700	61100	16900	15300	11100	9700	10100	8600
26	8560	11600	9110	8100	19100	79300	19100	15200	11100	9800	10100	8650
27	8600	11900	8480	8060	17100	62200	17300	15000	11000	9900	10100	8720
28	9060	11700	16500	8030	15200	44500	16000	14900	11000	9790	10100	8910
29	9600	11600	14600	8010	---	37500	15300	14800	10900	9650	10200	9020
30	10200	11600	10200	7940	---	31200	15800	14800	10800	9800	10300	8920
31	10900	---	9100	7940	---	26100	---	14800	---	9750	10400	---
TOTAL	272590	328060	374390	285330	804160	1282400	509900	529800	392300	313970	308580	263510
MEAN	8793	10940	12080	9204	28720	41370	17000	17090	13080	10130	9954	8784
MAX	10900	11900	24200	17700	84700	79300	22700	19100	15000	10800	10800	10600
MIN	8290	8040	8480	7940	9860	14100	13500	14800	10800	9650	9520	7940
AC-FT	540700	650700	742600	566000	1595000	2544000	1011000	1051000	778100	622800	612100	522700

CAL YR 1974 TOTAL 8103270 MEAN 22200 MAX 130000 MIN 8040 AC-FT 16070000
WTR YR 1975 TOTAL 5664990 MEAN 15520 MAX 84700 MIN 7940 AC-FT 11240000

11389000 SACRAMENTO RIVER AT BUTTE CITY, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: May 1955 to September 1966.
Water temperatures: May 1955 to September 1958, October 1959 to September 1967, July 1969 to current year.
EXTREMES.--Current year:
Water temperatures: Maximum, 20.0°C July 21-24, 27; minimum, 6.5°C Dec. 29, 30, Jan. 31 to Feb. 2.
Period of record:
Water temperatures: Maximum, 24.0°C June 2, 3, 5, 7, 1960; minimum (1955-57, 1959-62, 1963-67, 1969 to current year), freezing point Jan. 2-5, 1960.
REMARKS.--Clock stopped June 26-30; range in temperature, 16.5°C to 18.5°C.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	15.5	12.5	12.0	10.0	9.5	7.5	7.0	7.0	6.5	11.5	11.0
2	16.0	15.5	12.0	11.5	10.5	10.0	7.5	7.5	7.0	6.5	12.0	11.0
3	16.0	15.5	12.0	11.5	10.5	10.5	8.0	7.5	7.5	7.0	12.0	11.0
4	16.5	16.0	12.5	12.0	11.0	10.5	8.0	8.0	8.5	7.5	12.0	11.0
5	16.0	15.0	12.5	12.5	10.5	10.5	9.0	8.0	8.5	8.5	11.5	11.0
6	15.0	14.5	13.0	12.5	10.5	10.5	9.5	9.0	8.5	8.0	11.5	11.0
7	15.0	14.0	13.0	12.5	10.5	10.5	9.5	9.5	9.0	8.5	11.0	11.0
8	15.5	15.0	12.5	12.5	10.5	10.5	9.5	9.5	10.0	9.0	11.5	11.0
9	15.5	15.0	12.5	12.0	10.5	10.5	9.5	8.5	10.5	10.0	11.5	11.0
10	15.5	15.0	12.5	11.5	10.5	10.0	8.5	8.5	10.5	10.0	11.0	10.5
11	15.5	14.5	12.5	12.0	10.0	10.0	8.5	8.0	10.0	9.5	11.0	10.5
12	15.5	14.5	12.0	11.5	10.0	10.0	9.0	8.5	10.0	9.5	11.5	10.5
13	15.5	15.0	12.0	11.5	10.5	10.0	9.0	8.5	10.0	9.5	11.0	10.0
14	15.5	15.0	12.5	12.0	10.5	10.5	9.0	9.0	9.5	9.5	10.0	10.0
15	15.0	14.5	12.0	12.0	11.0	10.5	9.0	9.0	9.5	8.5	10.5	10.0
16	15.0	14.5	12.0	12.0	11.0	10.5	9.5	9.0	8.5	8.0	10.0	10.0
17	15.0	15.0	12.0	12.0	10.5	10.5	9.5	9.5	8.5	8.0	10.0	9.0
18	15.0	14.5	12.0	12.0	10.5	10.0	9.5	9.0	8.5	8.5	9.5	9.0
19	15.0	14.5	12.0	12.0	10.5	10.0	10.0	9.5	9.0	8.5	10.5	9.5
20	14.5	14.5	12.0	12.0	10.0	9.5	10.5	10.0	9.0	9.0	10.5	10.0
21	14.5	13.0	12.0	11.5	10.0	10.0	10.5	10.0	9.0	8.0	10.5	9.0
22	14.0	13.0	12.0	12.0	10.0	9.0	10.5	10.5	8.5	8.0	9.0	8.0
23	14.0	13.0	12.0	11.0	9.5	8.5	10.5	10.5	9.0	8.5	9.5	8.5
24	14.0	13.5	11.5	11.0	8.5	8.0	11.0	10.5	9.5	9.0	10.0	9.5
25	14.0	13.5	11.5	11.0	8.5	8.5	10.5	10.5	10.0	9.5	10.5	10.0
26	14.0	13.5	11.0	10.5	9.0	8.5	10.5	10.0	10.5	10.0	10.5	9.5
27	14.0	14.0	11.0	11.0	9.0	8.5	10.0	8.5	11.0	10.5	10.0	9.5
28	14.0	13.5	11.0	10.0	8.5	7.5	8.5	8.0	11.5	10.5	10.0	9.0
29	13.5	12.5	10.5	10.0	7.5	6.5	8.5	7.5	---	---	9.5	9.0
30	13.0	12.5	10.5	10.0	7.0	6.5	8.0	7.0	---	---	11.0	9.5
31	13.0	12.5	---	---	7.0	7.0	7.5	6.5	---	---	11.5	11.0
MONTH	16.5	12.5	13.0	10.0	11.0	6.5	11.0	6.5	11.5	6.5	12.0	8.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	11.5	15.0	14.0	19.0	17.5	17.5	17.0	18.5	16.5	17.5	16.0
2	12.5	11.5	15.0	14.0	18.0	17.0	17.5	15.5	18.5	16.5	18.0	16.0
3	12.0	11.0	14.5	13.5	18.0	16.5	18.0	16.0	19.0	17.0	18.0	16.0
4	12.0	11.0	13.5	12.5	18.0	16.5	19.0	17.0	17.5	16.0	17.5	16.0
5	11.5	10.5	13.5	12.5	19.0	17.5	19.0	17.0	18.0	16.0	18.0	16.5
6	11.5	11.0	14.0	13.0	19.5	18.0	18.5	16.5	18.5	17.0	18.5	17.0
7	11.5	11.0	14.5	13.0	19.5	18.0	19.0	17.0	18.0	16.5	19.0	18.0
8	11.5	10.5	15.0	14.0	18.5	17.5	19.0	17.0	18.0	16.5	19.0	18.0
9	11.5	11.0	15.5	14.5	18.5	17.0	19.5	17.0	18.5	16.5	19.0	18.0
10	13.5	11.5	15.0	14.5	18.5	17.0	19.0	17.5	18.5	16.5	18.5	17.0
11	14.0	12.5	15.0	14.0	18.5	17.0	19.5	17.5	18.5	16.5	18.0	17.0
12	14.5	13.0	15.0	14.0	18.5	17.0	19.5	17.5	18.5	16.5	18.5	17.5
13	14.5	13.5	15.5	14.5	18.5	17.0	20.0	18.0	18.5	17.0	19.0	17.5
14	14.0	13.0	16.0	15.0	19.0	17.0	20.0	18.0	18.5	17.0	19.0	18.0
15	13.5	11.5	15.5	14.5	19.0	17.5	19.0	17.0	18.5	17.0	19.0	18.0
16	12.5	11.0	15.5	15.0	19.0	17.5	18.5	16.5	18.5	17.0	19.0	18.0
17	13.0	11.5	16.0	14.5	18.5	16.5	18.5	17.0	18.0	17.0	18.5	17.5
18	13.5	12.0	16.5	15.0	17.5	16.5	19.5	17.5	17.0	15.5	18.5	17.5
19	14.5	12.5	16.0	15.0	17.0	16.0	19.5	17.5	17.0	15.0	18.5	17.5
20	14.5	13.0	15.0	13.5	17.5	16.0	19.5	17.5	18.0	16.0	18.5	17.5
21	15.5	14.0	14.5	13.5	18.0	16.5	20.0	18.0	18.0	17.0	18.5	17.5
22	15.0	13.5	16.0	14.5	18.5	16.5	20.0	18.0	18.5	17.0	18.5	17.5
23	14.0	13.0	16.5	15.0	18.5	17.0	20.0	18.0	19.0	17.0	18.5	17.5
24	13.0	12.5	17.0	15.5	17.5	16.0	20.0	18.0	19.0	17.0	18.0	17.0
25	12.5	12.0	16.5	15.5	17.5	15.5	19.5	18.0	19.0	17.0	18.0	17.0
26	12.0	11.5	17.0	15.5	---	---	19.5	17.5	19.0	17.0	18.0	17.0
27	13.0	11.5	17.5	15.5	---	---	20.0	17.5	18.0	17.0	17.5	17.0
28	14.0	12.5	17.5	16.0	---	---	19.5	18.0	17.5	16.0	17.5	16.5
29	14.5	13.0	18.0	16.5	---	---	19.5	17.5	17.0	16.0	17.0	16.0
30	15.0	13.5	18.5	17.0	---	---	19.0	17.5	17.5	16.0	17.0	16.0
31	---	---	19.0	17.0	---	---	18.5	16.5	17.5	16.0	---	---
MONTH	15.5	10.5	19.0	12.5	19.5	15.5	20.0	15.5	19.0	15.0	19.0	16.0

11389470 COLUSA WEIR SPILL TO BUTTE BASIN NEAR COLUSA, CALIF.

LOCATION.--Lat 39°14'11", long 121°59'33", in NW¼SE¼ sec.17, T.16 N., R.1 W., Colusa County, on left bank downstream end of Colusa weir 1.7 mi (2.7 km) northeast of Colusa Post Office.

PERIOD OF RECORD.--Sediment records: December 1972 to current year (flood periods only).

EXTREMES.--Current year:
Sediment concentrations: Maximum daily, 1,100 mg/l Feb. 14.
Total-sediment discharge: Maximum daily, 96,000 tons (87,100 tonnes) Feb. 14.
Period of record:
Sediment concentrations: Maximum daily, 3,020 mg/l Jan. 17, 1974.
Total-sediment discharge: Maximum daily, 414,000 tons (376,000 tonnes) Jan. 17, 1974.

REMARKS.--Colusa weir diverts flood flows from the Sacramento River into Butte Basin to reduce downstream flooding.

TOTAL-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1				0	0	0	0	0	0
2				0	0	0	0	0	0
3				0	0	0	0	0	0
4				0	0	0	0	0	0
5				0	0	0	0	0	0
6				0	0	0	0	0	0
7				0	0	0	0	0	0
8				0	0	0	5360	731	18600
9				4440	305	4510	17400	970	45600
10				11200	630	19200	15300	520	21500
11				1210	120	907	10500	400	11300
12				0	0	0	5840	432	6810
13				8540	531	17200	2080	160	899
14				33700	1100	96000	389	80	84
15				27800	615	50100	52	70	9.8
16				6680	255	5400	0	60	0
17				724	90	243	0	0	0
18				0	0	0	442	285	2330
19				0	0	0	14600	990	35100
20				0	0	0	27800	955	67300
21				0	0	0	29200	500	39400
22				0	0	0	27100	570	41700
23				0	0	0	34700	580	54300
24				0	0	0	23500	350	22200
25				0	0	0	20100	380	20600
26				0	0	0	30500	700	57600
27				0	0	0	27400	440	32600
28				0	0	0	11800	340	10800
29				---	---	---	4220	280	3190
30				---	---	---	670	150	271
31				---	---	---	0	0	0
MONTH				94294.00	---	193560.0	308953.0	---	492193.8

11389470 COLUSA WEIR SPILL TO BUTTE BASIN NEAR COLUSA, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL SEDI- MENT (MG/L)	TOTAL SEDI- MENT DIS- CHARGE (T/DAY)	TOTAL SED. FALL DIAM. % FINER THAN .002 MM	TOTAL SED. FALL DIAM. % FINER THAN .004 MM	TOTAL SED. FALL DIAM. % FINER THAN .008 MM	TOTAL SED. FALL DIAM. % FINER THAN .016 MM
FEB.									
09...	1100	10.0	2770	262	1960	--	--	--	--
09...	1600	10.0	5500	316	4690	--	--	--	--
10...	0945	9.5	13100	831	29400	--	--	--	--
10...	1155	10.0	12400	756	25300	33	45	58	71
10...	1545	10.0	10600	603	17300	38	52	66	78
11...	1000	9.5	1130	196	598	--	--	--	--
13...	1145	10.0	4190	616	6970	--	--	--	--
13...	1210	9.5	4910	598	7930	23	29	41	58
13...	1455	10.0	8990	1060	25700	--	--	--	--
13...	1650	10.0	10500	1070	30300	21	31	42	58
14...	0755	9.0	30600	1210	100000	21	32	44	53
14...	1215	10.0	34800	1440	135000	17	24	32	39
14...	1640	9.5	37500	1050	106000	23	33	42	51
15...	1000	9.0	31300	701	59200	--	--	--	--
15...	1545	9.0	24700	522	34800	--	--	--	--
16...	0915	8.5	7570	292	5970	--	--	--	--
16...	1500	8.5	5130	264	3660	--	--	--	--
17...	0915	8.0	790	140	299	--	--	--	--
MAR.									
08...	1400	10.5	5880	1860	29500	--	--	--	--
08...	1730	11.0	10000	1510	40800	--	--	--	--
09...	0920	11.0	15900	954	41000	--	--	--	--
09...	1550	11.0	15400	747	31100	--	--	--	--
10...	0930	10.5	15200	586	24000	--	--	--	--
10...	1515	10.5	13200	446	15900	--	--	--	--
11...	0915	10.0	10500	434	12300	--	--	--	--
11...	1045	10.5	10800	401	11700	--	--	--	--
11...	1515	10.5	10400	410	11500	--	--	--	--
11...	1705	11.0	10100	415	11300	29	40	50	63
12...	0825	10.0	6410	325	5630	--	--	--	--
12...	1335	11.0	5480	280	4140	32	44	55	69
12...	1500	11.0	5230	301	4250	--	--	--	--
13...	0930	11.0	2640	160	1140	--	--	--	--
13...	1600	11.0	1840	140	696	--	--	--	--
19...	0900	10.0	13100	1040	36800	--	--	--	--
19...	1515	10.0	15800	819	34900	--	--	--	--
20...	0815	10.0	25000	1100	74300	--	--	--	--
20...	1040	10.0	28700	1060	82100	--	--	--	--
20...	1650	10.0	29800	954	76800	--	--	--	--
21...	0820	10.0	30300	500	40900	--	--	--	--
21...	1315	9.5	28400	432	33100	18	25	33	42
21...	1620	10.0	27500	439	32600	--	--	--	--
22...	0915	9.0	23300	337	21200	--	--	--	--
22...	1545	9.0	27800	729	54700	--	--	--	--
23...	0940	8.5	37800	617	63000	--	--	--	--
23...	1600	8.5	35100	428	40600	--	--	--	--
24...	0840	9.5	22500	340	20700	--	--	--	--
24...	1730	9.5	18200	310	15200	--	--	--	--
25...	0910	9.5	17100	309	14300	--	--	--	--
25...	1625	9.5	18900	455	23200	--	--	--	--
26...	0950	9.5	30500	760	62600	--	--	--	--
26...	1625	9.5	33600	650	59000	--	--	--	--
27...	0815	9.5	28900	425	33200	--	--	--	--
27...	1640	9.5	19000	409	21000	--	--	--	--
28...	0845	9.5	11500	354	11000	--	--	--	--
29...	0850	9.0	4450	294	3530	--	--	--	--
30...	1000	10.0	610	154	254	--	--	--	--

11389470 COLUSA WEIR SPILL TO BUTTE BASIN NEAR COLUSA, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL SED. FALL DIAM. % FINER THAN .031 MM	TOTAL SED. FALL DIAM. % FINER THAN .062 MM	TOTAL SED. SIEVE DIAM. % FINER THAN .062 MM	TOTAL SED. FALL DIAM. % FINER THAN .125 MM	TOTAL SED. SIEVE DIAM. % FINER THAN .125 MM	TOTAL SED. FALL DIAM. % FINER THAN .250 MM	TOTAL SED. SIEVE DIAM. % FINER THAN .250 MM	TOTAL SED. FALL DIAM. % FINER THAN .500 MM	TOTAL SED. SIEVE DIAM. % FINER THAN .500 MM
FEB.									
09...	--	--	89	--	98	--	99	--	100
09...	--	--	88	--	99	--	100	--	--
10...	--	84	--	97	--	100	--	--	--
10...	82	91	--	98	--	100	--	--	--
10...	88	94	--	100	--	--	--	--	--
11...	--	--	99	--	100	--	--	--	--
13...	--	87	--	90	--	100	--	--	--
13...	79	93	--	100	--	--	--	--	--
13...	--	86	--	98	--	100	--	--	--
13...	72	84	--	97	--	100	--	--	--
14...	62	70	--	87	--	100	--	--	--
14...	45	57	--	75	--	99	--	100	--
14...	58	65	--	80	--	99	--	100	--
15...	--	57	--	69	--	99	--	100	--
15...	--	68	--	78	--	99	--	100	--
16...	--	92	--	98	--	100	--	--	--
16...	--	--	92	--	100	--	--	--	--
17...	--	--	100	--	--	--	--	--	--
MAR.									
08...	--	--	90	--	--	--	--	--	--
08...	--	--	86	--	--	--	--	--	--
09...	--	--	78	--	--	--	--	--	--
09...	--	--	75	--	--	--	--	--	--
10...	--	--	72	--	--	--	--	--	--
10...	--	--	76	--	--	--	--	--	--
11...	--	--	76	--	--	--	--	--	--
11...	--	84	--	93	--	100	--	--	--
11...	--	--	77	--	--	--	--	--	--
11...	70	85	--	94	--	100	--	--	--
12...	--	94	--	99	--	100	--	--	--
12...	83	--	94	--	99	--	100	--	--
12...	--	--	86	--	--	--	--	--	--
13...	--	--	94	--	--	--	--	--	--
13...	--	--	96	--	--	--	--	--	--
19...	--	--	84	--	--	--	--	--	--
19...	--	--	77	--	--	--	--	--	--
20...	--	--	69	--	--	--	--	--	--
20...	--	74	--	85	--	99	--	100	--
20...	--	--	58	--	--	--	--	--	--
21...	--	--	50	--	--	--	--	--	--
21...	49	56	--	65	--	96	--	100	--
21...	--	--	51	--	--	--	--	--	--
22...	--	--	56	--	--	--	--	--	--
22...	--	--	77	--	--	--	--	--	--
23...	--	--	53	--	--	--	--	--	--
23...	--	--	55	--	--	--	--	--	--
24...	--	--	62	--	--	--	--	--	--
24...	--	--	52	--	--	--	--	--	--
25...	--	--	68	--	--	--	--	--	--
25...	--	--	54	--	--	--	--	--	--
26...	--	--	67	--	--	--	--	--	--
26...	--	--	65	--	--	--	--	--	--
27...	--	--	67	--	--	--	--	--	--
27...	--	--	64	--	--	--	--	--	--
28...	--	--	75	--	--	--	--	--	--
29...	--	--	84	--	--	--	--	--	--
30...	--	--	96	--	--	--	--	--	--

11389500 SACRAMENTO RIVER AT COLUSA, CALIF.

LOCATION.--Lat 39°12'51", long 121°59'57", at north end of Jimeno Grant, Colusa County, on right bank just downstream from highway bridge at Colusa, and at mile 89.4 (143.8 km) upstream from Sacramento.

DRAINAGE AREA.--12,096 mi² (31,329 km²).

PERIOD OF RECORD.--April 1921 to October 1939 (low-water periods only), June 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2.95 ft (0.899 m) below mean sea level. Prior to December 1930, water-stage recorder in center fender pier 50 ft (15 m) upstream from bridge at same datum.

AVERAGE DISCHARGE.--35 years (1940-75), 11,680 ft³/s (330.8 m³/s), 8,462,000 acre-ft/yr (10.4 km³/yr).

EXTREMES.--Current year: Maximum discharge, 41,400 ft³/s (1,170 m³/s) Feb. 14 (gage height, 65.16 ft or 19.861 m); minimum daily, 7,500 ft³/s (212 m³/s) Sept. 9.

Period of record: Maximum discharge (1940 to current year), 49,000 ft³/s (1,390 m³/s) Feb. 8, 1942 (gage height, 69.20 ft or 21.092 m); minimum discharge recorded, 820 ft³/s (23.2 m³/s) July 25, 26, 1931 (gage height, 34.79 ft or 10.604 m).

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, power development, bypassing for flood control, diversions for irrigation, and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 1345: 1952.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8540	12000	11500	9460	8950	16000	23800	16600	15000	9900	9030	10100
2	8460	11800	11500	9100	15200	15800	21400	17000	15000	9800	9130	10100
3	8440	10500	12200	8900	23400	16200	19200	16900	14900	9780	9190	10200
4	8510	9800	16700	8800	17600	16200	17600	17500	14600	9710	9220	10000
5	8540	9000	21500	8800	16400	15700	17900	18300	14600	9630	9080	9360
6	8530	8590	17100	9200	15300	15300	19100	17800	14700	9680	9020	8760
7	8480	8200	14300	11800	16400	15900	19500	17500	15000	9700	9060	7820
8	8430	8600	13300	13300	24000	28400	18500	17500	14800	9720	9060	7600
9	8400	9800	12900	17000	32700	36500	19000	17400	14500	9570	8970	7500
10	8530	10800	12700	15400	35300	36300	18800	17600	14100	9480	9160	7560
11	8500	11100	12500	12200	31200	35200	17800	17900	13800	9360	9100	7820
12	8490	11300	12400	10800	24800	33900	16900	18100	13600	9350	9060	7990
13	8420	11400	12300	9860	31400	32300	16800	18200	13400	9240	9190	8130
14	8550	11500	12400	9570	40100	31300	17200	18300	13200	9230	8980	8120
15	8550	11500	12400	9380	39200	30800	17900	18600	13100	9290	9020	8130
16	8490	11700	12300	9100	34000	29400	18100	19100	13100	9430	9020	8240
17	8430	11700	12300	8900	31400	29600	16100	18900	13200	9760	9110	8240
18	8400	11700	12000	8800	29400	29700	15400	18700	12900	9760	9240	8180
19	8600	11700	11200	8800	27000	35800	15300	18700	12700	9620	9570	8210
20	9000	11700	10400	8800	26000	39100	15100	18800	12400	9500	10100	8230
21	9500	11700	10200	8760	29700	39800	14900	18200	11900	9440	10100	8270
22	10000	11800	10100	8680	27200	39100	14100	17000	11500	9450	9860	8330
23	10100	11900	9960	8660	24400	40900	14000	16300	11000	9350	9780	8390
24	9820	11800	9840	8580	22800	38400	14100	15900	10800	9040	9660	8310
25	8730	11800	9800	8580	21800	37300	15500	15500	10800	9200	9630	8300
26	8490	11800	9580	8580	20700	39700	18700	15400	10700	9350	9630	8310
27	8530	11900	8800	8540	19000	39300	17900	15200	10600	9330	9630	8340
28	8860	11800	11000	8440	17200	35700	16700	15100	10500	9220	9640	8560
29	9330	11700	17600	8400	---	33400	15800	15100	10300	9190	9730	8660
30	9900	11600	12200	8310	---	31300	15700	15000	10100	9300	9830	8670
31	10500	---	10100	8260	---	27700	---	15000	---	9090	10000	---
TOTAL	274050	332100	383080	301760	702550	942000	519100	533100	386800	293470	290800	254430
MEAN	8840	11070	12360	9734	25090	30390	17300	17200	12890	9467	9381	8481
MAX	10500	12000	21500	17000	40100	40900	23800	19100	15000	9900	10100	10200
MIN	8400	8200	8800	8260	8950	15300	14000	15000	10100	9040	8970	7500
AC-FT	543600	658700	759800	598500	1394000	1868000	1030000	1057000	767200	582100	576800	504700

CAL YR 1974 TOTAL 6482350 MEAN 17760 MAX 48400 MIN 8200 AC-FT 12860000
WTR YR 1975 TOTAL 5213240 MEAN 14280 MAX 40900 MIN 7500 AC-FT 10340000

11389500 SACRAMENTO RIVER AT COLUSA, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1966, water year 1972 (partial-record station). Sediment records: December 1972 to current year (flood periods only).

EXTREMES.--Current year:
Sediment concentrations: Maximum daily, 1,040 mg/l Mar. 8.
Sediment discharge: Maximum daily, 103,000 tons (93,400 tonnes) Feb. 14.
Period of record:
Sediment concentrations (1972-73, 1974 to current year): Maximum daily, 1,040 mg/l Mar. 8, 1975.
Sediment discharge (1972-73, 1974 to current year): Maximum daily, 103,000 tons (93,400 tonnes) Feb. 14, 1975.

REMARKS.--Total-sediment discharge tabulated only on days of spill over Colusa Weir. Total-sediment was determined by summing suspended and computed unmeasured loads.

SUSPENDED- AND TOTAL-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(During periods of flow over Colusa Weir only)

	FEBRUARY				MARCH			
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	TOTAL-SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	TOTAL-SEDIMENT DISCHARGE (TONS/DAY)
1	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---
8	---	---	---	---	28400	1040	73800	74100
9	32700	550	48600	49100	36500	990	97600	98300
10	35300	910	86700	87400	36300	580	56800	57500
11	31200	390	32900	33300	35200	470	44700	45400
12	24800	210	14100	14200	33900	380	34800	35400
13	31400	739	62700	63100	32300	250	21800	22300
14	40100	950	103000	104000	31300	160	13500	13900
15	39200	530	56100	56900	30800	140	11600	12000
16	34000	390	35800	63400	---	---	---	---
17	31400	250	21200	21600	---	---	---	---
18	---	---	---	---	29700	200	16000	16400
19	---	---	---	---	35800	890	86000	86700
20	---	---	---	---	39100	760	80200	81000
21	---	---	---	---	39800	380	40800	41600
22	---	---	---	---	39100	450	47500	48300
23	---	---	---	---	40900	420	46400	47200
24	---	---	---	---	38400	280	29000	29800
25	---	---	---	---	37300	330	33200	34000
26	---	---	---	---	39700	600	64300	65100
27	---	---	---	---	39300	400	42400	43200
28	---	---	---	---	35700	370	35700	36400
29	---	---	---	---	33400	370	33400	34000
30	---	---	---	---	31300	300	25400	25800
31	---	---	---	---	27700	---	---	---
MONTH	300100	---	461100	493000	744200	---	934900	948400
TOTAL	1044300		1396000	1441400				

11389500 SACRAMENTO RIVER AT COLUSA, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
FEB.										
11...	1100	9.5	31700	327	28000	26	36	45	56	66
13...	1330	9.5	33700	969	88200	16	21	31	44	59
13...	1730	10.0	35700	1090	105000	20	29	42	56	71
14...	0845	9.0	40400	1020	111000	27	38	50	61	71
14...	1730	9.5	41100	836	92800	28	39	51	61	69
MAR.										
11...	1315	10.5	35300	457	43600	26	35	45	55	64
12...	0955	10.5	34100	398	36600	--	--	--	--	--
12...	1420	10.5	33600	365	33300	26	33	43	53	64
20...	1145	10.0	39300	855	90700	--	--	--	--	--
21...	1400	--	40000	346	37400	25	35	44	55	64

DATE	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
FEB.										
11...	--	72	--	83	--	93	--	100	--	--
13...	71	--	84	--	93	--	99	--	100	--
13...	82	--	93	--	98	--	100	--	--	--
14...	78	--	90	--	97	--	100	--	--	--
14...	77	--	88	--	97	--	99	--	100	--
MAR.										
11...	--	77	--	87	--	96	--	100	--	--
12...	79	--	87	--	97	--	100	--	--	--
12...	--	75	--	83	--	92	--	99	--	100
20...	82	--	92	--	97	--	100	--	--	--
21...	--	72	--	84	--	94	--	100	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPERATURE (DEG C)	NUMBER OF SAMPLING POINTS	INSTANTANEOUS DISCHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM
FEB.							
11...	1215	9.5	4	31400	1	3	16
13...	1355	9.5	5	34000	--	--	8

DATE	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
FEB.							
11...	67	80	93	96	97	100	--
13...	43	63	76	87	95	97	100

11389950 LITTLE BUTTE CREEK AT MAGALIA, CALIF.

LOCATION.--Lat 39°48'38", long 121°35'00", in NW¼NE¼ sec.36, T.23 N., R.3 E., Butte County, on left bank 1,000 ft (305 m) downstream from Magalia Dam, and 0.4 mi (0.6 km) northwest of Magalia.

DRAINAGE AREA.--11.4 mi² (29.5 km²).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,160 ft (658 m), from topographic map.

AVERAGE DISCHARGE (unadjusted).--7 years, 19.8 ft³/s (0.561 m³/s), 14,350 acre-ft/yr (17.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 333 ft³/s (9.43 m³/s) Mar. 25 (gage height, 4.53 ft or 1.381 m); minimum daily, 0.07 ft³/s (0.002 m³/s) Oct. 17, 18, 20, 25, Dec. 23.

Period of record: Maximum discharge, 1,180 ft³/s (33.4 m³/s) Jan. 24, 1970 (gage height, 6.47 ft or 1.972 m); minimum daily, 0.04 ft³/s (0.001 m³/s) Sept. 25, 1974.

REMARKS.--Records fair. Flow regulated by Paradise Reservoir, capacity, 6,430 acre-ft (7.93 hm³) and Magalia Reservoir, capacity, 3,540 acre-ft (4.36 hm³). Diversion occurs above Magalia Reservoir through a 30-inch (76-cm) pipeline into Pacific Gas and Electric Co.'s Toadtown Canal when Magalia Reservoir is spilling. Diversion is made from Magalia Reservoir for the municipal supply of Paradise.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.15	.12	.17	2.6	18	45	16	.94	.67	.98	.82
2	.15	.15	.21	.17	2.4	31	41	14	.76	.64	1.0	.79
3	.15	.13	1.7	.16	1.1	29	41	15	.76	.52	1.0	.61
4	.15	.15	.64	.15	1.3	22	46	19	.73	.53	.93	.60
5	.15	.15	.30	.16	.79	20	48	16	.70	.58	.96	.53
6	.15	.14	.26	1.0	.85	27	42	13	.69	.71	.81	.55
7	.17	.40	.23	1.2	1.2	75	39	9.5	.70	.88	.63	.57
8	.26	.26	.20	.96	3.2	223	44	8.4	.70	.88	.68	.43
9	.15	.26	.23	.50	2.5	170	43	7.0	.68	.88	.68	.38
10	.09	.30	.23	.36	1.1	100	38	6.6	.64	.89	.70	.40
11	.11	.22	.17	.30	.69	67	35	6.4	.60	.95	.70	.43
12	.09	.23	.20	.29	4.4	50	31	4.2	.64	.93	.72	.37
13	.13	.27	.17	.26	5.4	47	28	1.5	.64	.92	.76	.45
14	.09	.19	.17	.26	1.4	44	29	.98	.64	.91	.75	.52
15	.11	.23	.11	.29	1.1	40	26	1.6	.64	.95	.83	.48
16	.09	.33	.11	.23	18	53	24	4.0	.69	1.0	.85	.58
17	.07	.25	.11	.27	47	47	23	2.8	.67	1.1	.90	.53
18	.07	.16	.15	.33	42	96	21	1.6	.62	1.1	.92	.53
19	.09	.12	.17	.18	44	205	19	1.0	.64	1.1	.96	.53
20	.07	.13	.23	.16	52	138	20	1.1	.65	1.2	.92	.43
21	.11	.47	.30	.18	39	103	18	1.0	.64	1.1	.90	.42
22	.13	.15	.23	.22	30	94	16	.96	.64	.97	.83	.43
23	.09	.13	.07	.26	26	71	18	.96	.69	1.0	.83	.34
24	.09	.15	.11	.26	23	93	57	1.0	.71	1.1	.86	.29
25	.07	.21	.17	.22	21	273	76	.96	.61	.99	.87	.38
26	.11	.19	.23	.33	19	147	41	.98	.62	.96	.83	.34
27	.15	.15	1.2	.31	18	99	30	1.0	.58	.96	.84	.35
28	.15	.12	.64	.17	17	77	24	1.0	.60	.96	.87	.31
29	.13	.13	.20	.22	---	64	20	.97	.64	.99	.88	.16
30	.15	.08	.20	.26	---	57	18	.89	.66	1.0	.91	.23
31	.20	---	.20	.37	---	51	---	.91	---	.97	.94	---
TOTAL	3.86	6.00	9.26	10.20	426.03	2631	1001	160.31	20.12	28.34	26.24	13.78
MEAN	.12	.20	.30	.33	15.2	84.9	33.4	5.17	.67	.91	.85	.46
MAX	.26	.47	1.7	1.2	52	273	76	19	.94	1.2	1.0	.82
MIN	.07	.08	.07	.15	.69	18	16	.89	.58	.52	.63	.16
AC-FT	7.7	12	18	20	845	5220	1990	318	40	56	52	27
(a)	672	253	249	246	211	230	289	864	1,340	1,420	1,180	1,140

CAL YR 1974 TOTAL 11347.03 MEAN 31.1 MAX 674 MIN .04 AC-FT 22510
WTR YR 1975 TOTAL 4336.14 MEAN 11.9 MAX 273 MIN .07 AC-FT 8600

a Diversion, in acre-feet, from Magalia Reservoir, furnished by Paradise Irrigation District.

11390000 BUTTE CREEK NEAR CHICO, CALIF.

LOCATION.--Lat 39°43'34", long 121°42'28", in NW¼NW¼ sec.36, T.22 N., R.2 E., Butte County, on right bank 0.7 mi (1.1 km) downstream from Little Butte Creek, and 7.5 mi (12.1 km) east of Chico.

DRAINAGE AREA.--147 mi² (381 km²).

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 320 ft (98 m), from topographic map. Prior to Aug. 13, 1944, water-stage recorder at site 0.4 mi (0.6 km) upstream at different datum.

AVERAGE DISCHARGE (unadjusted).--45 years, 414 ft³/s (11.72 m³/s), 299,900 acre-ft/yr (370 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,940 ft³/s (140 m³/s) Feb. 13 (gage height, 6.30 ft or 1.920 m); minimum daily, 94 ft³/s (2.66 m³/s) Oct. 17, 18.
Period of record: Maximum discharge, 21,200 ft³/s (600 m³/s) Dec. 22, 1964 (gage height, 14.12 ft or 3.304 m), from rating curve extended above 8,900 ft³/s (252 m³/s) on basis of slope-area measurement at gage height 13.35 ft (4.069 m); minimum, 10 ft³/s (0.28 m³/s) Nov. 29, 1952.

REMARKS.--Records excellent. Flow slightly regulated by storage in Magalia Reservoir, capacity, 3,540 acre-ft (4.36 hm³) and since 1957 by Paradise Reservoir, capacity, 6,430 acre-ft (7.93 hm³). Diversions above station for irrigation and domestic use of about 7,000 acre-ft (8.63 hm³) annually. Butte Creek receives water above station from West Branch Feather River by way of Toadtown Canal.

REVISIONS (WATER YEARS).--WSP 1445: 1953(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158	175	147	180	646	488	745	730	736	297	254	167
2	158	155	151	173	952	720	685	751	695	290	254	170
3	159	147	426	169	436	706	666	837	668	286	254	167
4	160	155	778	173	486	589	667	858	652	281	251	158
5	158	141	305	172	385	554	684	760	659	280	251	151
6	155	140	245	265	354	617	627	714	644	278	251	147
7	161	167	216	341	464	1190	592	709	622	277	248	146
8	151	212	196	606	1220	2440	646	717	574	276	248	146
9	170	166	184	397	2360	2050	617	757	544	274	248	148
10	177	151	180	314	1170	1460	600	784	511	272	248	152
11	174	148	174	272	710	1110	583	812	508	269	245	159
12	168	147	179	243	1320	894	586	864	480	267	245	153
13	169	147	207	230	3680	794	602	912	467	267	245	150
14	150	143	186	209	1490	709	634	947	456	267	241	148
15	99	143	181	213	876	657	591	955	453	267	241	145
16	96	142	176	209	663	760	560	987	445	274	241	145
17	94	142	172	204	579	678	534	911	423	269	241	143
18	94	168	166	205	517	1130	517	918	406	267	238	142
19	119	163	163	209	542	2850	514	930	390	267	236	143
20	121	151	159	210	715	1990	519	872	380	264	213	154
21	120	195	162	207	559	1670	543	771	366	264	199	152
22	120	274	166	206	496	1460	564	750	354	264	223	126
23	122	190	156	203	463	1080	568	741	344	264	199	119
24	125	167	150	202	449	1060	1180	753	353	261	188	135
25	127	179	157	202	444	2810	1410	744	350	261	183	140
26	128	184	156	208	442	1830	997	712	335	261	176	135
27	133	143	312	202	443	1320	860	710	324	258	170	153
28	214	155	418	188	459	1070	804	713	315	258	175	155
29	191	151	241	206	---	921	768	726	305	258	174	156
30	149	149	217	195	---	853	758	723	301	258	174	155
31	186	---	187	221	---	823	---	730	---	254	170	---
TOTAL	4506	4890	6913	7234	23320	37283	20621	24718	14060	8350	6924	4460
MEAN	145	163	223	233	833	1203	687	797	469	269	223	149
MAX	214	274	778	606	3680	2850	1410	955	736	297	254	170
MIN	94	140	147	169	354	488	514	709	301	254	170	119
AC-FT	8940	9700	13710	14350	46260	73950	40900	49030	27890	16560	13730	8850
(a)	3,270	3,080	3,710	4,130	5,520	7,280	6,770	7,100	6,730	6,350	5,810	4,150

CAL YR 1974 TOTAL 233775 MEAN 640 MAX 9609 MIN 94 AC-FT 463700
WTR YR 1975 TOTAL 163279 MEAN 447 MAX 3680 MIN 94 AC-FT 323900

Peak discharge (base, 2,700 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-13	0700	6.30	4,940	3-19	1300	5.31	3,750
3-8	0830	4.63	2,940	3-25	0930	5.15	3,560

a Toadtown Canal diversion, in acre-feet, from West Branch Feather River, furnished by Pacific Gas and Electric Co.

11390000 BUTTE CREEK NEAR CHICO, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water year 1953 (partial-record station), October 1953 to September 1968, water years 1969 to current year (partial-record station).
Water temperatures: November 1961 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 22.0°C July 22-24; minimum, 2.0°C Jan. 2, 3, 30.
Period of record:
Water temperatures: Maximum (1961-64, 1965 to current year), 26.0°C July 21, 22, 1966; minimum, 1.0°C Dec. 14, 15, 1967.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
MAY 02...	1030	752	130	10	2.5	37	0	30	.3	.00

DATE	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY 02...	.10	.01	28	0	.2	0	0	0	0	10

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
NOV. 15...	1425	142	114	7.3	9.5	1	13.2
JAN. 08...	1120	709	87	7.3	7.0	16	11.4
MAR. 20...	1205	1940	64	7.4	9.0	5	11.2
MAY 02...	1030	752	65	7.8	11.0	6	10.9
JULY 02...	0930	290	81	7.6	14.0	1	10.3
SEP. 22...	1130	145	108	8.0	18.0	1	10.0

11390000 BUTTE CREEK NEAR CHICO, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	14.5	12.5	10.5	6.0	4.5	3.5	2.5	6.5	3.5	9.0	6.0
2	16.5	15.0	11.5	9.5	7.0	5.5	3.5	2.0	6.5	6.0	8.5	8.0
3	17.5	15.5	11.0	9.5	10.0	7.0	3.0	2.0	6.0	6.0	8.0	6.5
4	17.0	15.5	11.0	9.0	10.0	8.5	4.0	3.0	6.0	5.5	8.5	7.5
5	15.5	14.0	10.5	9.0	8.5	8.0	4.5	4.0	6.0	5.5	9.0	8.0
6	15.5	13.5	10.5	9.0	8.0	7.5	6.0	4.5	6.0	6.0	9.0	8.5
7	15.0	13.0	10.5	10.0	8.0	7.5	7.0	6.0	7.0	6.0	9.0	8.5
8	16.5	14.0	10.5	9.0	8.5	7.5	7.5	7.0	8.5	7.0	9.0	8.5
9	16.0	15.0	9.5	8.0	7.5	6.0	7.0	5.5	9.0	5.0	9.0	8.0
10	15.0	13.5	9.5	8.0	6.5	6.0	5.5	5.0	8.0	7.5	9.0	8.0
11	14.5	12.5	9.0	7.5	6.5	6.0	5.0	4.5	8.0	7.5	9.0	8.0
12	14.0	12.5	9.5	8.0	7.0	6.5	5.5	4.5	8.5	8.0	9.0	7.0
13	13.5	12.0	9.5	8.0	7.0	6.5	5.5	4.5	8.5	8.0	8.0	7.0
14	14.0	12.0	10.0	8.5	6.5	6.5	5.5	4.0	8.5	7.0	8.5	7.0
15	14.5	12.0	10.0	9.0	7.0	6.0	5.0	4.5	7.0	6.0	8.0	7.5
16	14.5	12.0	9.5	8.5	7.0	6.5	5.5	4.5	6.5	6.0	7.5	6.5
17	14.5	12.5	9.5	8.5	7.0	6.0	6.0	5.0	6.0	5.0	7.0	6.5
18	14.5	12.5	9.5	9.0	6.0	5.0	6.5	5.0	6.5	5.5	8.0	7.0
19	13.5	12.5	9.0	8.0	5.5	4.5	7.0	6.0	7.5	6.5	8.5	8.0
20	14.0	12.0	8.5	8.0	6.0	5.0	7.0	6.0	7.0	6.0	8.5	8.0
21	13.0	11.5	10.0	8.5	6.5	5.5	7.0	5.5	6.5	5.0	8.0	6.5
22	12.5	11.0	10.0	8.0	5.5	5.0	7.0	6.0	6.0	4.5	7.5	6.5
23	12.5	10.5	8.0	7.0	5.0	3.5	7.5	6.0	7.0	5.5	8.0	7.0
24	12.0	10.5	8.0	6.5	3.5	2.5	8.0	6.0	7.5	6.0	8.5	8.0
25	12.0	13.0	8.5	7.5	4.0	3.0	8.0	6.0	8.0	6.5	8.5	8.0
26	12.5	11.0	7.5	6.0	4.5	3.5	7.5	6.5	8.0	7.0	8.0	6.5
27	12.5	11.5	7.0	6.0	6.0	4.5	6.5	4.5	8.5	7.5	8.0	6.5
28	12.5	12.0	6.5	5.5	6.0	4.5	5.0	3.0	9.0	8.0	7.0	6.0
29	12.0	10.5	6.5	5.0	4.5	3.0	4.0	2.5	---	---	8.0	6.0
30	10.5	10.0	6.0	5.0	4.0	3.0	3.5	2.0	---	---	9.0	7.5
31	10.5	10.0	---	---	3.0	2.5	3.5	2.5	---	---	9.5	8.0
MONTH	17.5	10.0	12.5	5.0	10.0	2.5	8.0	2.0	9.0	3.5	9.5	6.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	6.5	11.5	9.5	14.5	13.5	17.5	14.5	19.0	16.0	17.0	15.0
2	8.0	7.0	11.5	10.5	14.5	13.5	17.5	14.5	20.0	16.5	17.0	15.0
3	8.5	7.5	11.0	9.5	15.0	13.0	18.0	14.5	20.0	17.0	17.5	15.0
4	7.5	6.0	9.5	7.5	15.0	13.5	18.0	15.0	20.0	17.0	17.5	15.0
5	8.5	5.5	9.0	7.0	16.0	14.5	19.0	15.5	20.0	17.0	18.0	15.5
6	7.5	6.0	9.5	7.5	16.5	15.0	19.0	16.0	19.5	17.0	18.5	16.0
7	7.0	6.0	10.5	8.5	16.0	15.0	19.5	16.5	19.0	16.0	18.5	16.0
8	7.5	6.5	11.0	9.5	16.0	14.5	19.5	16.5	19.5	16.5	19.0	16.5
9	8.5	6.0	11.0	10.0	16.0	14.0	20.0	17.0	19.5	16.5	18.5	16.5
10	9.5	7.0	10.5	10.0	17.0	14.0	19.5	17.0	19.0	17.0	18.0	16.5
11	9.5	8.0	11.5	10.0	17.0	14.5	20.0	16.5	20.5	17.0	18.0	15.5
12	10.5	8.0	11.0	9.0	17.0	14.5	20.0	17.0	20.5	18.0	18.5	16.0
13	10.5	8.5	11.0	9.0	17.5	15.0	20.0	17.5	21.0	18.0	19.0	16.5
14	10.0	8.0	11.5	10.0	18.5	15.5	20.5	17.5	20.5	18.0	18.5	16.5
15	9.0	7.5	11.5	9.0	19.5	16.5	20.0	17.5	19.0	18.0	18.0	16.0
16	9.0	7.0	10.5	9.0	19.5	16.5	20.0	17.0	20.0	16.5	18.0	15.5
17	9.0	6.5	11.5	10.0	18.5	16.5	20.5	17.5	17.5	16.5	17.5	15.5
18	10.5	8.0	12.0	10.0	16.5	14.0	21.0	18.0	17.0	16.5	17.5	15.5
19	11.0	9.5	12.0	10.0	16.5	14.0	21.0	18.0	18.5	16.0	18.0	15.5
20	11.0	9.0	11.0	9.0	16.5	13.5	21.5	18.5	18.5	16.5	18.0	16.0
21	11.5	9.5	10.5	8.5	18.0	15.0	21.5	18.5	19.0	16.5	18.0	16.0
22	10.5	9.0	11.5	10.0	17.5	15.5	22.0	18.5	19.0	16.0	18.0	15.5
23	9.5	8.5	12.0	11.0	17.5	15.5	22.0	19.0	19.0	17.0	18.5	16.0
24	9.5	8.5	12.5	11.5	16.0	14.5	22.0	19.0	19.5	16.5	18.0	15.5
25	8.5	7.0	12.5	11.0	15.5	12.5	21.0	18.0	20.0	17.0	17.5	15.0
26	9.5	7.5	12.5	11.5	16.5	13.0	21.0	18.0	20.0	17.5	16.5	14.5
27	10.0	8.5	13.5	12.0	16.5	13.5	21.0	18.0	19.0	17.0	16.0	14.0
28	10.5	9.0	13.0	11.5	17.0	14.0	21.0	18.0	19.0	16.5	15.5	13.5
29	11.0	9.0	13.0	11.5	18.0	14.5	21.0	18.0	18.5	16.0	15.0	13.5
30	11.0	9.5	13.5	12.0	17.0	15.0	20.0	17.0	18.0	15.5	15.5	13.5
31	---	---	14.5	13.5	---	---	19.0	16.0	17.5	14.5	---	---
MONTH	11.5	5.5	14.5	7.0	19.5	12.5	22.0	14.5	21.0	14.5	19.0	13.5

11390500 SACRAMENTO RIVER BELOW WILKINS SLOUGH, NEAR GRIMES, CALIF.

LOCATION.--Lat 39°00'36", long 121°49'25", in NW¼NE¼ sec.2, T.13 N., R.1 E., Colusa County, on right bank 1,200 ft (366 m) downstream from Wilkins Slough, 5.8 mi (9.3 km) southeast of Grimes, and at mile 62.9 (101.2 km) upstream from Sacramento.

DRAINAGE AREA.--12,926 mi² (33,478 km²).

PERIOD OF RECORD.--August 1931 to September 1938 (low-water periods only), October 1938 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1965, published as "below Wilkins Slough."

GAGE.--Water-stage recorder. Datum of gage is 3.00 ft (0.914 m) below mean sea level.

AVERAGE DISCHARGE.--37 years (1938-75), 10,260 ft³/s (290.6 m³/s), 7,433,000 acre-ft/yr (9.16 km³/yr).

EXTREMES.--Current year: Maximum discharge, 28,000 ft³/s (793 m³/s) Mar. 23 (gage height, 48.58 ft or 14.807 m); minimum daily, 8,100 ft³/s (229 m³/s) Oct. 19.

Period of record: Maximum discharge (1938 to current year), 29,400 ft³/s (833 m³/s) Jan. 19, 1974 (gage height, 50.08 ft or 15.264 m); maximum gage height, 52.75 ft (16.078 m) Mar. 1, 1940; minimum discharge, 100 ft³/s (2.83 m³/s) Aug. 1, 1931 (gage height, 14.20 ft or 4.328 m).

REMARKS.--Records excellent. Natural flow of stream affected by storage reservoirs, power developments, bypassing for flood control, diversions for irrigation, and return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8330	10600	11400	9860	8840	15900	23800	13800	12800	8970	8270	9950
2	8310	11100	11400	9410	12600	15500	21800	14500	12800	8980	8320	10000
3	8280	10700	11700	9100	20900	15500	19500	14600	12700	8870	8410	10200
4	8300	9930	13400	8890	18800	15700	17800	14800	12600	8870	8430	10300
5	8400	9160	20800	8720	16200	15400	17200	15700	12500	8780	8360	9870
6	8460	8500	17900	8690	15600	15000	17900	15600	12600	8760	8330	9320
7	8390	8190	14600	9600	15500	15100	18600	15100	12800	8820	8320	8720
8	8340	8180	13200	12400	20300	20600	17900	15100	12900	8860	8390	8360
9	8300	8490	12700	14900	25300	26400	17800	15000	12600	8750	8320	8300
10	8340	9320	12500	15500	26200	26500	18200	15300	12300	8680	8440	8400
11	8450	10300	12200	12700	25700	26400	17300	15600	11900	8630	8430	8590
12	8410	10800	12000	11200	24100	26400	16500	15800	11700	8630	8430	8760
13	8380	10900	12000	10400	24800	26000	16000	16000	11500	8560	8420	9000
14	8450	11000	11900	9900	27400	25800	16200	16000	11300	8580	8390	9060
15	8520	11000	11400	9610	27500	25700	16500	16300	11200	8600	8360	9060
16	8480	11100	11900	9320	26500	25300	17200	16700	11200	8660	8360	9070
17	8330	11100	11800	9280	25900	25300	15800	16800	11200	8930	8420	9090
18	8170	11100	11700	9090	25500	25200	14500	16600	11000	9070	8660	9030
19	8100	11100	11200	8970	24900	26200	14200	16400	10700	8910	8830	8930
20	8110	11200	10300	8940	24300	26900	13700	16600	10500	8830	9280	8940
21	8710	11200	9990	8990	25200	27300	13500	16600	10200	8800	9630	8990
22	9300	11200	9860	9810	24800	27300	12700	15300	9950	8720	9530	9000
23	9520	11400	9760	8980	23800	27800	12300	14300	9570	8640	9390	9040
24	9500	11400	9680	8950	22500	27600	12200	13700	9320	8490	9360	9000
25	8700	11400	9620	8940	21400	27000	12800	13300	9270	8490	9290	8920
26	8500	11400	9550	8950	20400	27300	15600	13300	9280	8570	9290	8850
27	8450	11500	9200	8880	18900	27500	16100	13200	9250	8600	9260	8780
28	8500	11500	9520	8760	17300	26900	15000	13100	9200	8470	9340	8900
29	8800	11400	15700	8690	---	26500	13900	13100	9110	8400	9440	9050
30	9200	11400	13600	8620	---	26100	13300	12900	9010	8360	9630	9150
31	9860	---	10900	8590	---	25200	---	12800	---	8340	9810	---
TOTAL	265890	317570	373880	303840	611160	737300	485800	463900	332960	269620	273140	272630
MEAN	8577	10590	12060	9801	21830	23780	16190	14960	11100	8697	8811	9088
MAX	9860	11500	20800	15500	27500	27800	23800	16800	12900	9070	9810	10300
MIN	8100	8180	9200	8590	8840	15000	12200	12800	9010	8340	8270	8300
AC-FT	527400	629900	741600	602700	1212000	1462000	963600	920100	660400	534800	541800	540800

CAL YR 1974 TOTAL 5480500 MEAN 15020 MAX 29300 MIN 8100 AC-FT 10870000
WTR YR 1975 TOTAL 4707670 MEAN 12900 MAX 27800 MIN 8100 AC-FT 9338000

11390500 SACRAMENTO RIVER BELOW WILKINS SLOUGH, NEAR GRIMES, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: October 1966 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 21.0°C July 24, 25; minimum, 6.5°C Dec. 31.
Period of record:
Water temperatures: Maximum, 22.0°C June 23, 1970, June 29, 1973; minimum, 4.0°C Dec. 26, 1968.

REMARKS.--Clock stopped June 11 to July 1; range in temperature, 17.0°C to 19.5°C.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	16.5	13.0	13.0	10.5	10.0	7.0	7.0	7.0	7.0	12.0	11.5
2	17.0	16.5	13.0	12.0	10.5	10.0	7.5	7.0	7.0	7.0	12.0	11.5
3	17.0	16.5	12.0	11.5	11.0	10.5	7.5	7.5	7.0	7.0	12.0	11.5
4	17.0	16.5	12.0	12.0	11.0	10.5	8.0	7.5	7.5	7.0	12.0	12.0
5	16.5	16.0	12.5	12.0	11.5	11.0	8.0	8.0	8.5	7.5	12.5	12.0
6	16.0	15.0	13.0	12.5	11.5	10.5	9.0	8.0	8.5	8.0	12.0	11.5
7	15.0	14.5	13.0	13.0	11.0	10.5	9.5	9.0	8.5	8.0	12.0	11.5
8	15.5	15.0	13.0	12.5	11.0	11.0	9.5	9.5	9.0	8.5	12.5	11.5
9	15.5	15.5	12.5	12.0	11.0	11.0	9.5	9.0	10.0	9.0	12.5	12.0
10	15.5	15.0	12.0	12.0	11.0	10.5	9.0	8.5	10.5	10.0	12.0	11.5
11	15.5	15.0	12.0	12.0	10.5	10.5	8.5	8.0	10.0	10.0	11.5	11.5
12	15.0	14.5	12.5	12.0	10.5	10.0	8.0	7.5	10.0	10.0	12.0	11.5
13	15.0	14.5	12.0	11.5	10.0	10.0	8.0	8.0	10.0	9.5	11.5	11.5
14	15.0	14.5	12.0	11.5	10.5	10.0	8.5	8.0	10.5	10.0	11.5	10.5
15	15.5	14.5	12.5	12.0	10.5	10.0	8.5	8.5	10.5	9.5	11.0	10.5
16	15.0	14.5	12.5	12.0	10.5	10.5	9.0	8.5	9.5	9.0	11.0	10.0
17	15.0	14.5	12.5	12.0	10.5	10.0	9.0	9.0	9.0	8.5	10.5	10.0
18	15.0	14.5	12.5	12.0	10.5	10.5	9.0	9.0	9.0	8.5	10.5	9.5
19	15.0	14.5	12.0	11.5	10.5	10.0	9.0	9.0	9.5	9.0	10.5	10.0
20	14.5	14.0	12.0	11.5	10.0	9.5	9.5	9.0	9.5	9.5	11.0	10.5
21	14.5	13.5	12.0	11.5	9.5	9.5	10.0	9.5	9.5	9.0	11.0	10.0
22	13.5	12.5	12.0	11.5	9.5	9.0	10.0	10.0	9.0	8.0	10.0	9.5
23	13.5	13.0	11.5	11.0	9.0	8.5	10.0	10.0	9.5	8.5	9.5	9.5
24	14.0	13.0	11.5	11.0	8.5	7.5	10.0	10.0	10.0	9.5	9.5	8.5
25	13.5	13.0	11.0	11.0	8.5	8.0	10.5	10.0	10.5	10.0	9.5	9.5
26	13.5	13.0	11.0	10.5	8.5	8.0	10.0	10.0	11.0	10.0	9.5	9.5
27	14.0	13.5	11.5	11.0	8.5	8.5	10.0	9.0	11.5	10.5	9.5	9.5
28	14.0	14.0	11.5	10.5	9.0	8.5	9.0	8.0	11.5	11.0	9.5	9.0
29	14.0	13.5	11.0	10.5	8.5	7.0	8.0	8.0	---	---	9.0	8.5
30	13.5	13.0	10.5	10.5	7.0	7.0	8.0	7.0	---	---	10.0	9.0
31	13.5	13.0	---	---	7.0	6.5	7.0	7.0	---	---	11.0	10.0
MONTH	17.5	12.5	13.0	10.5	11.5	6.5	10.5	7.0	11.5	7.0	12.5	8.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	10.5	14.5	13.5	19.0	18.0	---	---	19.0	18.5	18.0	17.5
2	11.0	10.5	14.5	14.0	19.0	18.0	18.5	18.0	19.0	18.0	18.0	17.5
3	11.5	11.0	15.0	14.0	18.0	17.5	18.5	18.0	19.0	18.5	18.0	17.5
4	11.5	11.0	14.0	13.5	18.0	17.5	18.5	18.0	19.5	18.5	18.0	17.5
5	11.0	10.5	13.5	12.5	19.0	17.5	18.0	17.5	20.0	19.0	18.0	17.5
6	11.0	10.5	13.5	12.5	19.5	18.5	18.5	17.5	20.0	19.0	19.0	18.0
7	11.0	10.5	13.5	13.0	19.5	19.0	18.5	18.0	19.0	18.5	19.5	18.5
8	10.5	10.0	14.5	13.5	19.5	18.5	19.0	18.5	18.5	18.0	20.0	19.5
9	11.0	10.5	14.5	14.0	19.0	18.0	19.5	19.0	18.5	18.5	20.0	19.5
10	11.5	11.0	15.0	14.5	18.5	18.0	20.0	19.0	19.0	18.5	19.5	19.0
11	13.0	11.5	15.0	14.5	---	---	20.0	19.0	19.0	18.5	19.0	18.0
12	13.0	12.5	15.0	14.5	---	---	20.0	19.5	19.0	18.5	18.5	18.0
13	14.0	13.0	15.5	14.5	---	---	20.0	19.5	19.0	18.5	19.0	18.5
14	14.0	13.5	15.5	15.5	---	---	20.5	19.5	19.0	18.0	19.5	19.0
15	13.5	12.5	16.5	15.5	---	---	20.5	19.5	19.0	18.0	20.0	19.0
16	12.5	11.0	16.5	15.0	---	---	19.5	18.5	19.0	18.5	19.5	19.0
17	12.0	11.0	16.0	15.5	---	---	19.0	18.5	19.0	18.0	19.5	19.0
18	13.0	12.0	16.5	15.5	---	---	19.5	19.0	18.5	17.5	19.5	19.0
19	13.0	12.5	17.0	16.0	---	---	20.0	19.0	17.5	17.0	19.0	18.5
20	14.0	13.0	16.5	15.0	---	---	20.0	19.5	17.5	16.5	19.0	18.0
21	14.5	13.5	15.0	14.0	---	---	20.0	19.5	18.5	17.5	19.0	18.5
22	15.0	14.0	15.0	14.5	---	---	20.5	19.5	18.5	18.0	19.0	18.0
23	14.5	13.5	15.5	15.0	---	---	20.5	19.5	19.0	18.5	19.0	18.0
24	13.5	13.0	16.5	15.5	---	---	21.0	20.0	19.0	18.5	19.0	18.0
25	13.0	12.0	16.5	16.0	---	---	21.0	20.0	19.5	19.0	18.5	18.0
26	12.0	11.0	16.5	16.0	---	---	20.5	20.0	19.5	19.0	18.5	17.5
27	12.0	11.0	17.0	16.0	---	---	20.5	20.0	19.0	18.5	18.0	17.5
28	12.5	11.5	17.5	16.5	---	---	20.5	19.5	18.5	17.5	18.0	17.0
29	13.0	12.0	17.5	16.5	---	---	20.5	19.5	18.0	17.0	17.5	17.0
30	14.0	13.0	18.0	17.0	---	---	20.0	19.0	18.0	17.0	17.5	16.5
31	---	---	18.5	17.5	---	---	19.5	18.5	18.0	17.0	---	---
MONTH	15.0	10.0	18.5	12.5	---	---	21.0	17.5	20.0	16.5	20.0	16.5

11390650 SACRAMENTO RIVER ABOVE COLUSA TROUGH, AT KNIGHTS LANDING, CALIF.

LOCATION.--Lat 38°48'18", long 121°43'22", in NW¼ sec.14, T.11 N., R.2 E., Yolo County, on right bank, 0.25 mi (0.40 km) upstream from Colusa Drain, 0.35 mi (0.56 km) upstream from State Highway 24 bridge at Knights Landing, and approximately 0.3 mi (0.5 km) upstream from gaging station at railroad bridge.

PERIOD OF RECORD.--Chemical analyses: July 1960 to current year.

REMARKS.--Records of discharge given for Sacramento River at Knights Landing (sta 11391000). Chemical-quality records furnished by California Department of Water Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
OCT.											
23...	1230	10600	--	5.2	58	0	48	1.2	.11	.10	.13
NOV.											
19...	1350	11700	--	--	--	--	--	--	.13	.10	.06
DEC.											
18...	1300	12500	--	--	--	--	--	--	.20	.10	.04
JAN.											
22...	1320	9620	--	--	--	--	--	--	.22	.10	.07
FEB.											
26...	1140	22400	--	--	--	--	--	--	.19	.20	.37
MAR.											
26...	1410	26900	--	--	--	--	--	--	.12	.20	.12
APR.											
23...	1315	12200	2300	7.4	72	0	59	3.2	.14	.20	.09
MAY											
22...	1210	17100	--	--	--	--	--	--	.10	.20	.10
JUNE											
24...	1310	9840	--	--	--	--	--	--	.07	.20	.14
JULY											
29...	1310	8310	--	--	--	--	--	--	.11	.10	.09
AUG.											
26...	1250	10200	--	--	--	--	--	--	.07	.20	.09
SEP.											
24...	1345	9640	--	--	--	--	--	--	.07	.10	.04

DATE	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.										
23...	--	44	0	.3	0	--	--	--	--	--
NOV.										
19...	--	--	--	--	--	--	--	--	--	--
DEC.										
18...	--	--	--	--	--	--	--	--	--	--
JAN.										
22...	--	--	--	--	--	--	--	--	--	--
FEB.										
26...	--	--	--	--	--	--	--	--	--	--
MAR.										
26...	--	--	--	--	--	--	--	--	--	--
APR.										
23...	--	58	0	.4	0	0	10	0	40	20
MAY										
22...	--	--	--	--	--	--	--	--	--	--
JUNE										
24...	--	--	--	--	--	--	--	--	--	--
JULY										
29...	--	--	--	--	--	--	--	--	--	--
AUG.										
26...	--	--	--	--	--	--	--	--	--	--
SEP.										
24...	--	--	--	--	--	--	--	--	--	--

11390650 SACRAMENTO RIVER ABOVE COLUSA TROUGH, AT KNIGHTS LANDING, CALIF.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)
OCT. 23...	1230	10600	112	7.4	13.0	14	9.9
NOV. 19...	1350	11700	125	7.7	12.0	8	10.7
DEC. 18...	1300	12500	142	7.6	10.0	9	11.4
JAN. 22...	1320	9620	145	7.5	9.0	8	11.0
FEB. 26...	1140	22400	153	7.4	9.5	29	11.4
MAR. 26...	1410	26900	134	7.9	10.5	60	11.1
APR. 23...	1315	12200	146	8.0	15.0	14	9.9
MAY 22...	1210	17100	131	7.6	16.0	22	9.6
JUNE 24...	1310	9840	132	8.0	19.0	14	8.8
JULY 29...	1310	8310	139	7.4	21.5	10	8.5
AUG. 26...	1250	10200	162	7.4	20.0	13	8.5
SEP. 24...	1345	9640	140	7.6	20.0	10	8.6

11390655 SOUTH FORK WILLOW CREEK NEAR FRUTO, CALIF.

LOCATION.--Lat 39°32'28", long 122°23'19", in SW¼SE¼ sec.35, T.20 N., R.5 W., Glenn County, on right bank 150 ft (46 m) downstream from county road bridge, and 4.5 mi (7.2 km) southeast of Fruto.

DRAINAGE AREA.--38.9 mi^2 (100.8 km^2).

PERIOD OF RECORD.--July 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 375 ft (114 m), from topographic map.

AVERAGE DISCHARGE.--12 years, 5.82 ft^3/s (0.165 m^3/s), 4,220 acre-ft/yr (5.20 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,020 ft^3/s (28.9 m^3/s) Mar. 21 (gage height, 7.84 ft or 2.390 m); no flow for several months.

Period of record: Maximum discharge, 3,620 ft^3/s (103 m^3/s) Feb. 7, 1973 (gage height, 12.58 ft or 3.834 m), from rating curve extended above 1,000 ft^3/s (28.3 m^3/s) on basis of slope-area measurement of peak flow; no flow for several months in most years.

REMARKS.--Records good. No known regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					26	1.4	8.1	1.9	.76	.03		
2					20	1.3	7.7	1.7	.80	.05		
3					3.2	1.2	7.4	1.7	.68	.04		
4					.82	1.3	6.9	1.6	.52	.04		
5					.18	1.5	6.6	1.6	.62	.04		
6					.28	1.7	8.7	1.4	.54	.02		
7					10	209	7.0	1.4	.38	.01		
8					91	46	6.7	1.3	.25	.01		
9					70	25	7.7	1.3	.19	0		
10					32	50	5.5	1.3	.17	0		
11					8.4	33	5.0	1.2	.20	0		
12					102	18	4.4	1.1	.20	0		
13					64	14	4.2	1.1	.15	0		
14					17	12	4.3	1.1	.13	0		
15					9.0	9.8	4.1	1.1	.16	0		
16					5.6	9.3	4.0	.98	.19	.03		
17					4.0	8.2	3.8	.87	.20	0		
18					3.7	19	3.5	.85	.16	0		
19					3.2	11	3.3	.86	.23	0		
20					2.7	7.8	3.1	.76	.20	0		
21					2.0	219	3.1	.74	.17	0		
22					1.8	62	2.9	.79	.14	0		
23					1.7	30	2.8	.76	.11	0		
24					1.6	26	3.2	.76	.09	0		
25					1.5	28	3.2	.68	.09	0		
26					1.4	17	2.8	.77	.09	0		
27					1.4	15	2.4	.74	.08	0		
28					1.4	12	2.1	.66	.06	0		
29					---	11	2.0	.64	.03	0		
30					---	10	2.0	.66	.03	0		
31		---			---	9.4	---	.70	---	0		---
TOTAL	0	0	0	0	485.88	919.9	138.5	33.02	7.62	.27	0	0
MEAN	0	0	0	0	17.4	29.7	4.62	1.07	.25	.009	0	0
MAX	0	0	0	0	102	219	8.7	1.9	.80	.05	0	0
MIN	0	0	0	0	.18	1.2	2.0	.64	.03	0	0	0
AC-FT	0	0	0	0	964	1820	275	65	15	.5	0	0

CAL YR 1974 TOTAL 1174.24 MEAN 3.22 MAX 181 MIN 0 AC-FT 2330
WTR YR 1975 TOTAL 1585.19 MEAN 4.34 MAX 219 MIN 0 AC-FT 3140

Peak discharge (base, 250 ft^3/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-8	2130	6.85	668	3-7	1300	7.76	986
2-12	1600	6.08	435	3-21	1630	7.84	1,020

11390660 WALKER CREEK AT ARTOIS, CALIF.

LOCATION.--Lat 39°37'32", long 122°11'45", in SW¼SW¼ sec.34, T.21 N., R.3 W., Glenn County, on left bank 500 ft (152 m) upstream from county road bridge, and 0.3 mi (0.5 km) north of Artois.

DRAINAGE AREA.--60.4 mi² (156.4 km²).

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 156.4 ft (47.67 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--10 years, 22.9 ft³/s (0.649 m³/s), 16,590 acre-ft/yr (20.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,990 ft³/s (56.4 m³/s) Mar. 21 (gage height, 8.77 ft or 2.673 m); minimum daily, 0.34 ft³/s (0.010 m³/s) Nov. 6, 26.

Period of record: Maximum discharge, 5,660 ft³/s (160 m³/s) Feb. 7, 1973 (gage height, 11.69 ft or 3.563 m), from rating curve extended above 1,800 ft³/s (51.0 m³/s) on basis of contracted-opening measurement at gage height 11.69 ft (3.563 m); no flow at times most years.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Several small storage ponds above station for irrigation.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1966-68(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	4.6	2.2	12	233	2.6	6.9	5.8	9.0	4.8	16	12
2	19	3.0	2.6	9.6	378	2.5	6.3	6.8	11	6.3	17	16
3	16	2.0	17	6.9	73	2.1	5.7	7.6	14	4.6	7.9	16
4	12	1.5	279	6.0	47	1.9	5.3	7.9	10	8.2	8.7	20
5	11	.93	73	5.5	42	1.9	6.3	12	7.0	10	10	19
6	9.1	.34	38	6.3	30	2.2	16	10	9.0	12	7.9	15
7	11	2.2	19	7.5	216	44	27	8.3	11	7.1	8.0	11
8	14	5.9	9.2	7.1	340	169	21	11	9.0	4.0	11	13
9	13	8.6	8.6	5.9	654	236	16	11	7.0	5.3	11	19
10	13	8.5	11	5.6	204	335	11	15	5.0	5.7	12	15
11	9.5	5.5	11	5.2	76	130	15	8.5	5.0	8.8	10	15
12	13	6.0	10	5.2	349	55	17	7.0	5.5	10	8.3	27
13	11	6.7	9.7	4.8	533	33	11	6.8	5.0	9.3	5.0	18
14	6.2	6.7	9.2	4.2	136	26	8.3	5.4	4.0	7.9	23	13
15	4.9	6.5	8.8	4.1	60	18	9.1	7.1	4.5	13	19	17
16	5.2	5.6	5.5	4.1	35	11	11	8.7	6.0	20	13	18
17	6.7	6.3	3.3	4.1	21	9.1	9.5	8.4	9.0	20	15	16
18	9.4	6.3	4.8	4.1	13	8.5	7.2	6.8	14	12	23	13
19	10	5.9	7.8	3.8	13	13	8.5	4.8	12	9.4	22	12
20	9.4	5.7	7.4	3.8	11	8.8	8.8	11	22	12	14	13
21	7.4	6.0	8.0	4.2	9.1	204	13	15	14	16	18	18
22	8.9	4.1	7.4	3.8	5.6	469	17	14	10	14	21	22
23	12	1.8	6.2	3.6	4.6	81	16	13	13	13	19	21
24	13	.93	5.7	3.4	3.9	58	17	11	8.0	7.3	15	15
25	14	.55	5.4	3.4	3.6	84	14	13	5.4	11	26	13
26	9.1	.34	5.2	3.2	3.2	49	15	10	4.2	7.3	30	12
27	7.5	4.7	6.6	2.9	3.0	29	15	9.0	4.8	8.6	19	16
28	11	6.1	31	2.7	2.7	17	8.5	10	7.9	6.8	14	16
29	15	6.2	40	3.0	---	11	9.6	8.0	7.1	7.8	28	22
30	15	5.3	14	2.4	---	8.8	6.7	7.0	7.1	11	24	23
31	9.2	---	11	3.1	---	7.7	---	8.0	---	7.2	14	---
TOTAL	340.5	134.79	677.6	151.5	3499.7	2136.4	358.7	287.9	260.5	300.4	489.8	496
MEAN	11.0	4.49	21.9	4.89	125	68.9	12.0	9.29	8.68	9.69	15.8	16.5
MAX	19	8.6	279	12	654	469	27	15	22	20	30	27
MIN	4.9	.34	2.2	2.4	2.7	1.9	5.3	4.8	4.0	4.0	5.0	11
AC-FT	675	267	1340	301	6940	4240	711	571	517	596	972	984

CAL YR 1974 TOTAL 4858.59 MEAN 13.3 MAX 831 MIN .34 AC-FT 9640
WTR YR 1975 TOTAL 9133.79 MEAN 25.0 MAX 654 MIN .34 AC-FT 18120

Peak discharge (base, 600 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
12-4	0700	6.69	686	2-12	2200	7.99	1,410
2-1	2130	7.70	1,220	3-10	1630	6.72	708
2-9	0330	8.45	1,740	3-21	2300	8.77	1,990

NOTE.--No gage-height record May 24 to June 24.

11390672 STONE CORRAL CREEK NEAR SITES, CALIF.

LOCATION.--Lat 39°17'18", long 122°18'00", in NW¼NW¼ sec.34, T.17 N., R.4 W., Colusa County, on left bank at road bridge, 2.4 mi (3.9 km) southeast of Sites.

DRAINAGE AREA.--38.2 mi^2 (98.9 km^2).

PERIOD OF RECORD.--March 1958 to September 1964, October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 180 ft (55 m), from topographic map.

AVERAGE DISCHARGE.--16 years (1958-64, 1965-75), 6.42 ft^3/s (0.182 m^3/s), 4,650 acre-ft/yr (5.73 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,890 ft^3/s (53.5 m^3/s) Mar. 21 (gage height, 13.01 ft or 3.965 m); no flow for several months.

Period of record: Maximum discharge, 5,430 ft^3/s (154 m^3/s) Feb. 6, 1973 (gage height, 16.45 ft or 5.014 m), from rating curve extended above 1,200 ft^3/s (34.0 m^3/s) on basis of slope-conveyance study at gage height 13.0 ft (3.96 m) and a slope-area measurement at 16.45 ft (5.014 m); no flow for several months in each year.

Flood of Apr. 2, 1958, reached a stage of 14.93 ft (4.551 m), discharge, 2,500 ft^3/s (70.8 m^3/s).

Flood of Dec. 22, 1964, reached a stage of 13.0 ft (3.96 m), from floodmarks (discharge, 1,940 ft^3/s or 54.9 m^3/s from slope-conveyance study).

REMARKS.--No known diversion or regulation above station.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	.40	.70	4.4	1.4				
2				0	.30	.70	3.9	1.4				
3				0	.20	.70	3.7	1.4				
4				0	.30	.70	3.4	1.3				
5				0	.20	.70	3.1	1.3				
6				0	.30	.80	4.9	1.3				
7				0	.30	101	4.3	1.3				
8				0	1.3	18	3.3	1.2				
9				0	31	8.7	3.1	1.2				
10				0	29	14	2.7	1.2				
11				0	4.5	8.2	2.5	1.2				
12				0	42	4.6	2.2	1.1				
13				0	76	3.5	2.0	1.1				
14				0	12	3.9	1.9	1.0				
15				0	6.5	3.4	1.7	.70				
16				0	4.0	13	1.6	.50				
17				0	2.7	5.6	1.5	.30				
18				0	2.1	58	1.5	.20				
19				0	1.9	17	1.6	.10				
20				0	1.6	8.4	1.6	.10				
21				0	1.2	333	1.6	.10				
22				0	1.0	69	1.6	.10				
23				0	1.0	27	1.5	.10				
24				0	.90	19	1.5	.10				
25				0	.90	15	1.5	.10				
26				0	.80	9.3	1.4	0				
27				0	.80	7.8	1.4	0				
28				0	.80	7.3	1.4	.10				
29				0	---	6.5	1.4	.10				
30				0	---	6.0	1.4	.10				
31		---		.20	---	5.4	---	.10	---			---
TOTAL	0	0	0	.20	224.00	776.90	69.6	20.20	0	0	0	0
MEAN	0	0	0	.007	8.00	25.1	2.32	.65	0	0	0	0
MAX	0	0	0	.20	76	333	4.9	1.4	0	0	0	0
MIN	0	0	0	0	.20	.70	1.4	0	0	0	0	0
AC-FT	0	0	0	.4	444	1540	138	40	0	0	0	0

CAL YR 1974 TOTAL 1199.30 MEAN 3.29 MAX 159 MIN 0 AC-FT 2380
WTR YR 1975 TOTAL 1090.90 MEAN 2.99 MAX 333 MIN 0 AC-FT 2160

11390700 COLUSA TROUGH NEAR COLUSA, CALIF.

LOCATION.--Lat 39°11'43", long 122°03'34", in SE¼NE¼ sec.34, T.15 N., R.2 W., Colusa County, at gaging station 3 mi (5 km) west of Colusa, on State Highway 20, and 6 mi (10 km) northeast of Williams.

PERIOD OF RECORD.--Chemical analyses: Water years 1953 (partial-record station), October 1953 to current year.

REMARKS.--Records furnished by California Department of Water Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
NOV. 19...	1025	82	--	--	90	294	6	251	48	--
JAN. 22...	0945	446	--	--	107	292	0	239	65	--
APR. 23...	0905	116	3400	160	88	193	0	158	56	.28
SEP. 24...	0750	517	--	--	62	245	0	201	34	--

DATE	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV. 19...	--	--	242	0	2.5	300	--	--	--	--
JAN. 22...	--	--	238	0	3.0	400	--	--	--	--
APR. 23...	.90	.27	196	38	2.7	200	0	10	10	20
SEP. 24...	--	--	188	0	2.0	200	--	--	--	--

DATE	TIME	DIS-CHARGE (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)
OCT. 23...	0915	173	584	7.8	13.0	29	8.9
NOV. 19...	1025	82	827	8.1	11.5	19	10.2
DEC. 18...	0940	88	915	8.1	9.0	22	9.7
JAN. 22...	0945	446	812	7.8	10.0	34	9.9
FEB. 26...	0845	263	1230	8.0	11.0	44	9.2
MAR. 26...	1015	850	759	8.2	10.0	98	10.1
APR. 23...	0905	116	758	8.0	14.0	22	8.8
MAY 22...	0925	1360	560	7.8	19.0	43	7.3
JUNE 24...	0905	657	544	7.8	20.0	25	6.9
JULY 29...	0930	756	541	7.4	24.0	18	6.4
AUG. 26...	0835	1220	525	7.6	22.0	20	6.0
SEP. 24...	0750	517	538	7.8	20.5	52	7.1

11391000 SACRAMENTO RIVER AT KNIGHTS LANDING, CALIF.

LOCATION.--Lat 38°48'11", long 121°42'55", in NW¼NE¼ sec.14, T.11 N., R.2 E., Sutter County, on left bank just upstream from Southern Pacific Railroad bridge at Knights Landing, 13.1 mi (21.1 km) upstream from Feather River, and at mile 34.0 (54.7 km) upstream from Sacramento.

DRAINAGE AREA.--14,541 mi^2 (37,661 km^2).

PERIOD OF RECORD.--April 1921 to October 1939 (low-water periods only), June 1940 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 2.93 ft (0.893 m) below mean sea level. April 1921 to Dec. 9, 1930, in fender pier of railroad bridge at same datum. Water-stage recorder for station at Verona was used as auxiliary gage for this station January 1941 to June 1945. Since Aug. 16, 1945, auxiliary water-stage recorder 6.0 mi (9.7 km) downstream from base gage.

AVERAGE DISCHARGE.--35 years (1940-75), 11,000 ft^3/s (311.5 m^3/s), 7,970,000 acre-ft/yr (9.83 km^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 28,600 ft^3/s (810 m^3/s) Mar. 9; minimum daily, 8,220 ft^3/s (233 m^3/s) Aug. 1.

Period of record: Maximum discharge (1940 to current year), 30,800 ft^3/s (872 m^3/s) Jan. 26, 1970 (gage height, 40.86 ft or 12.454 m); maximum gage height, 41.83 ft (12.750 m) Feb. 8, 1942 (backwater from Feather River and Sutter Bypass); minimum discharge recorded, 250 ft^3/s (7.08 m^3/s) July 23, 1931 (gage height, 7.80 ft or 2.377 m).

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, power developments, bypassing for flood control, diversions for irrigation, and considerable return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9420	12300	11600	10900	9310	17200	24300	12600	12700	9150	8220	11500
2	9420	13400	11600	10200	11300	16700	23000	13400	12500	9250	8330	11500
3	9230	13200	11900	9680	20200	16600	20000	13600	12500	9070	8580	11700
4	9320	12100	12800	9470	21000	16800	16400	13800	12400	9200	8580	11900
5	9400	10900	21300	9350	17000	16500	16800	14700	12100	9070	8460	11600
6	9540	9910	20700	9210	16700	16200	18300	15300	11800	9190	8390	10900
7	9410	9260	15700	9360	16600	16100	19600	14800	11800	9260	8370	10400
8	9350	9210	14100	12200	20400	20500	18000	14300	11900	9340	8520	9850
9	9270	9310	13400	14300	27300	28600	18700	14200	11600	9300	8480	9590
10	9320	10100	13100	17000	27900	28500	19400	14500	11200	9100	8600	9800
11	9510	11200	13200	14000	26900	26700	18000	15000	10900	8990	8630	9960
12	9500	12000	13100	12200	25600	25800	17500	15500	10800	8930	8640	10300
13	9590	12200	13000	10900	23300	25300	16700	15500	10700	8750	8520	10400
14	9520	12200	12800	10300	26200	25300	16900	15400	10500	8520	8700	10700
15	9550	11800	12900	10000	26800	25100	17100	15500	10400	8520	8640	10400
16	9670	11800	12800	9960	25400	24700	18100	16100	10300	8730	8640	10300
17	9630	11700	12800	9650	26200	24700	17200	16600	10400	9170	8770	10300
18	9550	11700	12500	9550	27200	24600	15400	16900	10500	9490	9130	10100
19	9390	11700	12100	9330	26900	25600	14800	17100	10400	9350	9640	9810
20	9300	11700	11200	9560	25900	26900	14400	16800	10300	9370	10200	9600
21	9530	11600	10600	9670	26600	27900	14100	17700	10500	9150	10900	9710
22	10200	11400	10500	9620	26800	26700	13100	17100	10400	8870	11000	9700
23	10600	11400	10500	9590	25900	27600	12200	15700	10200	8730	10700	9680
24	10900	11500	10200	9450	24800	27200	11900	15000	9840	8630	10500	9640
25	10700	11500	10100	9350	23600	26600	12000	14800	9570	8490	10300	9420
26	9920	11400	10000	9320	22400	26900	14400	14500	9340	8530	10200	9310
27	9770	11500	9790	9150	20900	27300	16400	14300	9510	8680	10200	9240
28	10100	11600	9690	8900	18900	26800	15100	13800	9570	8560	10300	9200
29	10400	11600	15300	8940	---	26300	13600	13500	9600	8310	10500	9240
30	10900	11600	16000	8790	---	26000	12500	13200	9360	8230	10800	9320
31	11500	---	12900	8910	---	25200	---	12700	---	8350	11200	---
TOTAL	303410	342790	398180	318810	638010	742900	495900	463900	323590	276280	290640	305070
MEAN	9787	11430	12840	10280	22790	23960	16530	14960	10790	8912	9375	10170
MAX	11500	13400	21300	17000	27900	28600	24300	17700	12700	9490	11200	11900
MIN	9230	9210	9690	8790	9310	16100	11900	12600	9340	8230	8220	9200
AC-FT	601800	679900	789800	632400	1265000	1474000	983600	920100	641800	548000	576500	605100

CAL YR 1974 TOTAL 5728210 MEAN 15690 MAX 29300 MIN 8610 AC-FT 11360000
WTR YR 1975 TOTAL 4899480 MEAN 13420 MAX 28600 MIN 8220 AC-FT 9718000

RESERVOIRS IN FEATHER RIVER BASIN, CALIF.

11391370 FRENCHMAN LAKE.--Lat 39°53'36", long 120°11'17", in NW¼NE¼ sec.33, T.24 N., R.16 E., Plumas County, in valve chamber at center of toe of Frenchman Dam on Little Last Chance Creek, 5.4 mi (8.7 km) upstream from the confluence with Middle Fork Feather River, and 7.1 mi (11.4 km) north of Chilcoot. Drainage area, 81.1 mi^2 (210.0 km^2). Period of record, October 1966 to current year in reports of Geological Survey. November 1961 to September 1966 published in reports of California Department of Water Resources. Gage is a water-stage recorder in valve house at center of toe of Frenchman Dam. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 50,269 acre-ft (62.0 hm^3) May 28-31 (elevation, 5,584.60 ft or 1,702.186 m); minimum, 29,158 acre-ft (36.0 hm^3) Sept. 30 (elevation, 5,567.95 ft or 1,697.111 m). Extremes for period 1966 to current year: Maximum contents, 59,093 acre-ft (72.9 hm^3) May 22, 1967 (elevation, 5,590.28 ft or 1,703.917 m); minimum, 29,158 acre-ft (36.0 hm^3) Sept. 30, 1975 (elevation, 5,567.95 ft or 1,697.111 m).

Reservoir is formed by rockfill dam completed in 1961. Capacity, 53,626 acre-ft (66.1 hm^3), revised, between elevations 5,517 ft (1,681.6 m), invert of intake and 5,588 ft (1,703.2 m), crest of spillway. Dead storage, 1,840 acre-ft (2.27 hm^3). Records, including extremes, represent total contents at 2400 hours. Records of contents furnished by California Department of Water Resources.

11391490 LAKE DAVIS.--Lat 39°53'03", long 120°28'31", in NW¼SW¼ sec.1, T.23 N., R.13 E., Plumas County, in control house on left abutment of Grizzly Valley Dam on Big Grizzly Creek, 5.3 mi (8.5 km) north of Portola. Drainage area, 44.0 mi^2 (114.0 km^2). Period of record, November 1966 to current year. Gage is a water-stage recorder in control house on Grizzly Valley Dam. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 80,436 acre-ft (99.2 hm^3) June 11-13, 18 (elevation, 5,774.01 ft or 1,759.918 m); minimum, 60,339 acre-ft (74.4 hm^3) Jan. 31 (elevation, 5,768.49 ft or 1,758.236 m). Extremes for period of record: Maximum contents, 92,818 acre-ft (114 hm^3) May 13, 14, 1969 (elevation, 5,777.05 ft or 1,760.845 m); minimum since reservoir first filled, 60,339 acre-ft (74.4 hm^3) Jan. 31, 1975 (elevation, 5,768.49 ft or 1,758.236 m).

Reservoir is formed by earth- and rockfill dam completed in 1967. Capacity, 84,040 acre-ft (104 hm^3) between elevations, 5,700 ft (1,737.4 m), top of low-level intake and 5,775 ft (1,760.2 m), crest of spillway. Dead storage, 108 acre-ft (133,000 m^3). Records, including extremes, represent total contents at 2400 hours. Records of contents furnished by California Department of Water Resources.

11401120 ANTELOPE LAKE.--Lat 40°10'48", long 120°30'25", in SE¼SE¼ sec.22, T.27 N., R.12 E., Plumas County, in control house at toe of Antelope Dam on Indian Creek, 1.3 mi (2.1 km) south of Boulder Creek Guard Station, 12 mi (19.3 km) northeast of Genesee, and 13.9 mi (22.4 km) northeast of Taylorsville. Drainage area, 68.6 mi^2 (177.7 km^2). Period of record, October 1966 to current year in reports of Geological Survey. November 1963 to September 1966 published in reports of California Department of Water Resources. Gage is a water-stage recorder in control house at toe of Antelope Dam. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 24,306 acre-ft (30.0 hm^3) May 18 (elevation, 5,003.83 ft or 1,525.167 m); minimum, 13,617 acre-ft (16.8 hm^3) Feb. 5 (elevation, 4,990.95 ft or 1,521.242 m). Extremes for period 1966 to current year: Maximum contents, 25,010 acre-ft (30.8 hm^3) Jan. 23, 1970 (elevation, 5,004.55 ft or 1,525.387 m); minimum since reservoir first filled, 400 acre-ft (493,000 m^3) Oct. 13, 1971 (elevation, 4,951.50 ft or 1,509.217 m), caused by draining lake for removal of nongame fish. Normal minimum since reservoir first filled, 2,125 acre-ft (2.62 hm^3) Sept. 30, 1971 (elevation, 4,964.40 ft or 1,513.149 m).

Reservoir is formed by a rockfill dam. Storage began November 1963. Capacity, 22,566 acre-ft (27.8 hm^3) between elevations 4,950 ft (1,508.8 m), lip of intake tower and 5,002 ft (1,524.6 m), crest of spillway. Records, including extremes, represent contents at 2400 hours. Records of contents furnished by California Department of Water Resources.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
		FRENCHMAN LAKE			LAKE DAVIS			ANTELOPE LAKE	
Sept. 30..........	5,771.53	71,019	--	5,575.67	38,049	--	4,999.92	20,622	--
Oct. 31...........	5,770.95	68,907	-2,112	5,575.40	37,711	-338	4,999.31	20,085	-537
Nov. 30...........	5,770.74	68,151	-756	5,575.31	37,599	-112	4,999.18	19,972	-113
Dec. 31...........	5,770.88	68,655	+504	5,575.60	37,961	+362	4,999.26	20,042	+70
CAL YR 1974....	--	--	-9,020	--	--	-2,750	--	--	-3,172
Jan. 31...........	5,768.49	60,339	-8,316	5,575.94	38,388	+427	a4,992.00	a14,303	-5,721
Feb. 28...........	5,769.31	63,125	+2,786	5,576.64	39,276	+888	4,992.05	14,388	+85
Mar. 31...........	5,770.10	65,875	+2,750	5,576.67	39,315	+39	4,995.33	16,841	+2,453
Apr. 30...........	5,769.97	65,418	-457	a5,578.31	a41,446	+2,131	5,000.18	20,906	+4,065
May 31............	5,773.66	79,069	+13,651	a5,584.60	a50,269	+8,823	a5,003.62	a24,102	+3,196
June 30...........	5,773.83	79,731	+662	5,580.89	44,941	-5,328	5,002.41	22,950	-1,152
July 31...........	5,773.07	76,792	-2,939	5,577.97	40,999	-3,942	5,001.96	22,529	-421
Aug. 31...........	5,772.45	74,439	-2,353	5,571.20	32,712	-8,287	5,000.44	21,139	-1,390
Sept. 30..........	5,771.94	72,532	-1,907	5,567.95	29,158	-3,554	4,999.22	20,059	-1,080
WTR YR 1975....	--	--	+1,513	--	--	-8,891	--	--	-563

a Estimated.

11391400 LITTLE LAST CHANCE CREEK BELOW FRENCHMAN DAM, NEAR CHILCOOT, CALIF.

LOCATION.--Lat 39°53'36", long 120°11'17", in SW¼NE¼ sec.33, T.24 N., R.16 E., Plumas County, Plumas National Forest, in valve house at toe of Frenchman Dam, 7.1 mi (11.4 km) northwest of Chilcoot.

DRAINAGE AREA.--81.1 mi² (210.0 km²).

PERIOD OF RECORD.--October 1958 to current year. Prior to October 1969, published as Little Last Chance Creek near Chilcoot.

GAGE.--Water-stage recorder and steel-lipped Cipolletti weir. Datum of release gage is 5,480.00 ft (1,670.304 m). October 1958 to September 1967, at site 1.9 mi (3.1 km) downstream at different datum.

AVERAGE DISCHARGE (unadjusted).--17 years, 29.4 ft³/s (0.833 m³/s), 21,300 acre-ft/yr (26.3 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 157 ft³/s (4.45 m³/s) May 29 to June 9; minimum daily, 0.80 ft³/s (0.023 m³/s) Feb. 17-20.

Period of record: Maximum discharge, 784 ft³/s (22.2 m³/s) Feb. 8, 1960 (gage height, 5.56 ft or 1.695 m, previous site and datum), from rating curve extended above 310 ft³/s (8.78 m³/s); no flow Oct. 23, 1959, July 24-27, 29, Aug. 4, 1961. Maximum discharge since construction of Frenchman Dam in 1961, 544 ft³/s (15.4 m³/s) May 23, 1967; no flow Apr. 10, 1973.

REMARKS.--Flow regulated by Frenchman Reservoir beginning Nov. 7, 1961, usable capacity, 53,580 acre-ft (66.1 hm³). Records since October 1967 are combined flow of release from Frenchman Dam and flow over spillway.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	3.9	3.9	2.3	2.1	24	53	74	157	24	96	54
2	5.2	3.9	3.9	2.3	2.1	24	56	74	157	24	115	54
3	5.2	3.9	3.9	2.3	2.1	24	56	74	157	24	126	54
4	5.2	3.9	3.9	2.3	2.1	24	56	74	157	24	126	54
5	5.2	3.9	3.9	2.3	2.1	24	56	74	157	24	126	54
6	5.2	3.9	3.9	2.3	2.1	24	56	75	157	24	147	54
7	5.2	3.9	3.9	2.3	2.1	24	56	75	157	24	154	54
8	5.2	3.9	3.9	2.3	2.1	24	56	75	157	40	154	54
9	5.2	3.9	3.9	2.3	2.0	24	56	75	157	58	153	54
10	5.2	3.9	3.9	2.3	1.9	24	56	75	155	73	152	54
11	5.2	3.9	3.9	2.3	1.8	24	56	75	155	78	151	54
12	3.2	3.9	3.9	2.3	1.5	32	56	84	155	78	150	54
13	2.1	3.9	3.0	2.3	1.6	37	56	97	155	78	149	54
14	2.1	3.9	2.3	2.3	1.5	44	56	103	155	69	149	54
15	2.1	3.9	2.3	2.3	1.3	48	56	112	155	59	149	54
16	2.1	3.9	2.3	2.1	.90	48	56	112	155	48	149	54
17	2.1	3.9	2.3	2.3	.80	48	56	112	154	40	149	54
18	2.1	3.9	2.3	2.3	.80	48	56	112	154	40	149	54
19	2.1	3.9	2.3	2.3	.80	48	56	112	154	40	149	54
20	2.1	3.9	2.3	2.1	.80	48	56	112	153	40	149	54
21	3.1	3.9	2.3	2.1	15	48	67	112	153	40	149	54
22	3.9	3.9	2.3	2.1	24	48	74	112	153	40	149	53
23	3.9	3.9	2.3	2.1	24	48	74	112	153	40	149	53
24	3.9	3.9	2.3	2.1	24	48	74	112	75	40	149	53
25	3.9	3.9	2.3	2.1	24	48	74	112	42	65	116	53
26	3.9	3.9	2.3	2.1	24	48	74	112	34	72	75	53
27	3.9	3.9	2.3	2.1	24	48	74	112	24	72	54	53
28	3.9	3.9	2.3	2.3	24	48	74	148	24	76	54	53
29	3.9	3.9	2.3	2.3	---	48	74	157	24	80	54	53
30	3.9	3.9	2.3	2.3	---	48	74	157	24	90	54	52
31	3.9	---	2.3	2.1	---	48	---	157	---	96	54	---
TOTAL	119.3	117.0	91.2	69.3	215.50	1193	1850	3179	3819	1620	3899	1610
MEAN	3.85	3.90	2.94	2.24	7.70	38.5	61.7	103	127	52.3	126	53.7
MAX	5.2	3.9	3.9	2.3	24	48	74	157	157	96	154	54
MIN	2.1	3.9	2.3	2.1	.80	24	53	74	24	24	54	52
AC-FT	237	232	181	137	427	2370	3670	6310	7570	3210	7730	3190

CAL YR 1974 TOTAL 13265.10 MEAN 36.3 MAX 208 MIN 1.8 AC-FT 26310
WTR YR 1975 TOTAL 17782.30 MEAN 48.7 MAX 157 MIN .80 AC-FT 35270

11391460 BERRY CREEK NEAR SATTLEY, CALIF.

LOCATION.--Lat 39°36'04", long 120°25'23", in SW¼NE¼ sec.9, T.20 N., R.14 E., Sierra County, on right bank 1.0 mi (1.6 km) south of Sattley, and 3.2 mi (5.1 km) northwest of Sierraville.

DRAINAGE AREA.--7.54 mi² (19.53 km²).

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,000 ft (1,520 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 112 ft³/s (3.17 m³/s) June 6 (gage height, 3.59 ft or 1.094 m); minimum daily, 5.5 ft³/s (0.16 m³/s).
Period of record: Maximum discharge, 125 ft³/s (3.54 m³/s) Nov. 12, 1973 (gage height, 3.80 ft or 1.158 m); minimum daily, 5.5 ft³/s (0.16 m³/s) Feb. 23, 1975.

REMARKS.--Records good. Some minor diversions at times upstream. Data for period 1954-67 at same site published by California Department of Water Resources as Miller Creek near Sattley.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	8.1	6.4	5.8	6.0	6.6	6.5	8.1	72	32	12	8.4
2	7.9	7.7	6.2	5.9	7.3	6.3	6.2	9.3	72	31	12	8.3
3	8.1	7.6	7.0	6.0	6.8	6.2	6.2	10	72	29	11	8.2
4	8.0	7.4	8.6	5.8	5.7	6.1	6.2	8.9	71	29	11	8.1
5	7.9	7.3	6.5	5.8	5.7	6.5	6.0	8.0	77	28	11	8.1
6	7.9	7.3	6.3	6.2	5.6	6.3	6.0	7.9	82	27	11	8.0
7	7.9	7.6	6.1	6.3	5.6	6.3	5.8	9.2	76	25	11	7.9
8	8.1	7.3	5.9	6.3	6.2	6.5	5.8	12	71	25	11	7.8
9	7.9	7.2	5.8	6.2	7.1	6.3	5.8	15	69	24	10	8.0
10	7.9	7.1	5.8	5.9	6.1	6.3	5.8	19	67	23	10	8.6
11	7.9	7.0	5.8	5.8	5.9	6.1	5.8	24	69	23	10	8.3
12	7.4	7.1	6.5	5.8	5.8	6.0	5.8	25	70	22	10	8.1
13	7.4	7.1	6.3	5.8	6.5	6.0	6.0	28	74	21	10	7.9
14	7.4	7.1	6.0	5.8	6.0	6.0	6.5	37	76	20	9.7	7.9
15	7.4	7.1	6.0	6.0	5.8	5.8	6.0	33	79	20	9.7	7.9
16	7.4	6.9	5.9	5.9	5.8	6.0	6.0	31	76	20	9.7	7.8
17	7.2	6.9	5.8	5.8	5.6	5.8	5.8	34	73	19	9.6	7.7
18	7.3	7.0	5.9	5.8	5.6	5.8	5.8	40	61	18	12	7.7
19	7.2	6.6	5.8	5.8	5.7	6.2	6.2	46	58	17	12	7.7
20	7.2	6.5	5.8	5.8	5.7	6.0	6.1	36	56	17	11	7.6
21	7.3	8.2	5.9	5.8	5.6	6.0	6.8	26	54	16	12	7.4
22	7.3	7.3	5.6	5.7	5.6	7.7	7.2	30	52	16	10	7.4
23	7.3	6.8	5.6	5.6	5.9	6.0	7.2	39	50	15	9.7	7.3
24	7.3	6.9	5.6	5.7	5.6	6.7	8.0	48	51	14	9.4	7.3
25	7.4	6.8	5.6	5.8	5.8	12	7.8	49	47	14	9.3	7.2
26	7.3	6.6	5.6	5.8	5.8	7.9	7.1	49	43	14	9.1	7.2
27	7.5	6.5	5.7	5.8	5.9	7.2	7.0	54	40	13	8.9	7.2
28	11	6.5	5.7	5.7	6.4	6.7	7.4	56	37	13	8.8	7.1
29	8.0	6.3	5.6	5.7	---	6.5	7.7	60	35	13	8.7	7.0
30	8.1	6.4	5.6	5.7	---	6.7	7.8	63	33	13	8.6	7.0
31	8.4	---	5.6	5.8	---	7.2	---	72	---	12	8.5	---
TOTAL	240.2	212.2	186.5	181.6	166.7	203.7	194.3	987.4	1863	623	316.7	232.1
MEAN	7.75	7.07	6.02	5.86	5.95	6.57	6.48	31.9	62.1	20.1	10.2	7.74
MAX	11	8.2	8.6	6.3	7.3	12	8.0	72	82	32	12	8.6
MIN	7.2	6.3	5.6	5.6	5.5	5.8	5.8	7.9	33	12	8.5	7.0
AC-FT	476	421	370	360	331	404	385	1960	3700	1240	628	460

CAL YR 1974 TOTAL 7269.1 MEAN 19.9 MAX 82 MIN 5.6 AC-FT 14420
WTR YR 1975 TOTAL 5407.4 MEAN 14.8 MAX 82 MIN 5.5 AC-FT 10730

Peak discharge (base, 80 ft³/s).--June 6 (1845) 112 ft³/s (3.59 ft).

11391500 BIG GRIZZLY CREEK AT GRIZZLY VALLEY DAM, NEAR PORTOLA, CALIF.

LOCATION.--Lat 39°53'00", long 120°28'29", in NW¼SW¼ sec.1, T.23 N., R.13 E., Plumas County, at Grizzly Valley Dam on Big Grizzly Creek, 5.3 mi (8.5 km) north of Portola.

DRAINAGE AREA.--44.0 mi² (114.0 km²).

PERIOD OF RECORD.--October 1925 to September 1932, October 1950 to September 1953, June 1954 to September 1967, October 1968 to current year. Prior to October 1952, published as Grizzly Creek near Portola, October 1952 to September 1953, June 1954 to September 1967, published as Big Grizzly Creek near Portola.

GAGE.--Water-stage recorder and Cipolletti weir. Altitude of gage is 5,700 ft (1,740 m), from topographic map. Supplementary water-stage recorder in control house on Grizzly Valley Dam and concrete spillway. Prior to October 1968 at different site and datum.

AVERAGE DISCHARGE (prior to regulation by Lake Davis).--22 years (1925-32, 1950-53, 1954-66), 38.2 ft³/s (1.082 m³/s), 27,680 acre-ft/yr (34.1 hm³/yr); 8 years (1967, 1968-75), 34.6 ft³/s (0.980 m³/s), 25,070 acre-ft/yr (30.9 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 150 ft³/s (4.25 m³/s) May 14-27; minimum daily, 8.0 ft³/s (0.23 m³/s) many days.

Period of record: Maximum discharge, 4,080 ft³/s (116 m³/s) Feb. 1, 1963 (gage height, 8.03 ft or 2.448 m, site and datum then in use), from rating curve extended above 600 ft³/s (17 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 9.54 ft (2.908 m), former site and datum, Mar. 26, 1928; no flow Jan. 22 or 23, 1962. Maximum discharge since construction of Grizzly Valley Dam in 1966, 253 ft³/s (7.16 m³/s) May 13, 1969 (includes flow through spillway); no flow many days in September and October 1969.

REMARKS.--Flow regulated by Lake Davis completed in December 1966, usable capacity, 84,050 acre-ft (104 hm³). Diversions for irrigation of about 400 acres (1.62 km²) above station and domestic water supply via Grizzly Valley pipeline.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1315-A: 1930(M). WSP 1931: Drainage area at former site.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	24	8.0	8.0	8.0	8.0	56	70	67	15	15	17
2	24	24	8.0	72	8.0	8.0	70	70	67	15	15	17
3	24	24	8.0	138	8.0	8.0	70	70	67	15	15	17
4	24	24	8.0	138	8.0	8.0	70	72	67	15	15	17
5	24	24	8.0	138	8.0	8.0	70	73	35	15	15	17
6	24	24	8.0	138	8.0	8.0	70	73	23	15	15	17
7	24	24	8.0	138	8.0	8.0	70	74	23	27	19	17
8	24	24	8.0	138	8.0	8.0	70	74	23	62	13	17
9	24	24	8.0	138	8.0	8.0	70	74	23	15	12	17
10	24	24	8.0	138	8.0	8.0	70	74	23	15	15	17
11	24	24	8.0	138	8.0	8.0	70	74	23	15	15	17
12	24	24	8.0	138	8.0	8.0	70	74	23	15	15	17
13	24	24	8.0	138	8.0	8.0	70	105	23	15	15	17
14	24	24	8.0	138	8.0	12	70	150	23	15	15	17
15	24	14	8.0	138	8.0	18	70	150	23	15	15	18
16	24	8.0	8.0	138	8.0	18	70	150	23	15	15	19
17	24	8.0	8.0	138	8.0	18	70	150	17	15	15	18
18	24	8.0	8.0	138	8.0	18	70	150	15	15	15	18
19	24	8.0	8.0	138	8.0	18	70	150	15	15	15	17
20	24	8.0	8.0	138	8.0	18	70	150	15	15	15	17
21	24	8.0	8.0	138	8.0	18	70	150	15	15	15	17
22	24	8.0	8.0	138	8.0	18	70	150	15	15	17	17
23	24	8.0	8.0	138	8.0	18	70	150	15	15	17	17
24	24	8.0	8.0	138	8.0	18	70	150	15	15	17	17
25	24	8.0	8.0	138	8.0	18	70	150	15	15	17	17
26	24	8.0	8.0	138	8.0	18	70	150	15	15	17	17
27	24	8.0	8.0	138	8.0	18	70	150	15	15	17	17
28	24	8.0	8.0	138	8.0	18	70	107	15	15	17	17
29	24	8.0	8.0	138	---	18	70	67	15	15	17	17
30	24	8.0	8.0	138	---	18	70	67	15	15	17	9.9
31	24	---	8.0	86	---	18	---	67	---	15	17	---
TOTAL	744	470.0	248.0	4030.0	224.0	422.0	2086	3385	768	524	484	506.9
MEAN	24.0	15.7	8.00	130	8.00	13.6	69.5	109	25.6	16.9	15.6	16.9
MAX	24	24	8.0	138	8.0	18	70	150	67	62	19	19
MIN	24	8.0	8.0	8.0	8.0	8.0	56	67	15	15	12	9.9
AC-FT	1480	932	492	7990	444	837	4140	6710	1520	1040	960	1010
(a)	43	22	19	26	15	19	25	50	75	80	65	38

CAL YR 1974 TOTAL 19953.0 MEAN 54.7 MAX 177 MIN 8.0 AC-FT 39580
WTR YR 1975 TOTAL 13891.9 MEAN 38.1 MAX 150 MIN 8.0 AC-FT 27550

a Diversions, in acre-feet, to Grizzly Valley pipeline.

11392100 MIDDLE FORK FEATHER RIVER NEAR PORTOLA, CALIF.

LOCATION.--Lat 39°49'07", long 120°26'37", in SW¼NW¼ sec.29, T.23 N., R.14 E., Plumas County, on right bank 0.8 mi (1.3 km) downstream from Big Grizzly Creek and 1.5 mi (2.4 km) northeast of Portola.

DRAINAGE AREA.--586 mi² (1,517 km²).

PERIOD OF RECORD.--October 1968 to current year. November 1955 to September 1968 in bulletins of California Department of Water Resources.

GAGE.--Water-stage recorder. Altitude of gage is 4,860 ft (1,481 m), from topographic map.

AVERAGE DISCHARGE.--7 years, 282 ft³/s (7.986 m³/s), 204,300 acre-ft/yr (252 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,120 ft³/s (88.4 m³/s) Mar. 27 (gage height, 7.42 ft or 2.262 m); minimum daily, 15 ft³/s (0.42 m³/s) Feb. 5, 6.
Period of record: Maximum discharge, 7,640 ft³/s (216 m³/s) Jan. 21, 1969 (gage height, 10.18 ft or 3.103 m); minimum daily, 3.1 ft³/s (0.088 m³/s) Sept. 11, 12, 1969.

REMARKS.--Flow partly regulated by Frenchman Lake (see sta 11391370) and Lake Davis (see sta 11391490).

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	79	58	28	34	493	493	504	275	113	26	54
2	34	81	57	71	28	841	472	504	276	100	28	50
3	34	81	62	247	24	1120	436	529	288	90	29	49
4	35	80	77	208	19	1020	411	591	284	82	30	48
5	35	78	85	167	15	798	421	650	258	75	32	47
6	36	75	104	169	15	700	465	663	227	71	34	49
7	37	73	110	190	17	770	459	597	222	67	36	50
8	40	72	82	238	21	967	454	510	217	126	36	47
9	41	70	78	247	36	1270	445	472	209	61	28	47
10	41	69	66	331	36	1080	428	471	199	51	35	54
11	42	71	61	379	46	698	443	482	185	47	36	56
12	42	72	63	335	51	491	444	503	175	40	37	60
13	42	71	64	276	83	406	435	541	170	35	36	59
14	42	71	63	244	143	367	453	629	168	35	33	61
15	41	65	66	231	196	362	469	652	165	34	31	60
16	42	50	67	226	214	391	471	681	165	33	30	60
17	43	50	64	226	258	427	440	687	168	35	30	59
18	44	51	60	230	274	453	410	660	168	35	33	57
19	44	52	53	239	229	573	386	641	169	35	43	58
20	44	52	51	245	229	659	402	625	162	35	46	58
21	44	61	51	246	270	667	416	670	160	35	47	57
22	44	68	46	245	293	323	428	713	154	33	56	57
23	44	75	48	248	252	411	447	666	153	32	59	55
24	45	84	44	246	205	560	495	635	159	32	68	54
25	46	89	33	245	187	1330	628	587	160	30	65	54
26	49	81	30	244	208	2580	814	564	165	28	99	54
27	53	75	34	214	242	2460	859	521	164	27	109	54
28	62	72	31	212	314	852	701	473	152	24	108	54
29	65	67	35	195	---	717	587	379	138	22	98	53
30	69	61	34	189	---	598	532	334	126	22	76	50
31	75	---	28	155	---	503	---	303	---	24	62	---
TOTAL	1388	2096	1805	6966	3939	24875	14744	17425	5681	1509	1530	1625
MEAN	44.8	69.9	58.2	225	141	802	491	562	189	48.7	49.4	54.2
MAX	75	89	110	379	314	2580	859	713	288	126	109	61
MIN	33	50	28	28	15	323	386	303	126	22	26	47
AC-FT	2750	4160	3580	13820	7810	49340	29240	34560	11270	2990	3030	3220

CAL YR 1974 TOTAL 97368 MEAN 267 MAX 3170 MIN 24 AC-FT 193100
WTR YR 1975 TOTAL 83583 MEAN 229 MAX 2580 MIN 15 AC-FT 165800

11392500 MIDDLE FORK FEATHER RIVER NEAR CLIO, CALIF.

LOCATION.--Lat 39°45'14", long 120°35'42", in NW¼SE¼ sec.23, T.22 N., R.12 E., Plumas County, on left bank 0.6 mi (1.0 km) upstream from Frazier Creek, 1.0 mi (1.6 km) northwest of Clio, and 2.2 mi (3.5 km) southeast of Blairsden.

DRAINAGE AREA.--686 mi² (1,777 km²).

PERIOD OF RECORD.--October 1925 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,380 ft (1,335 m), from topographic map. Prior to July 29, 1953, at site 0.5 mi (0.8 km) downstream at different datum.

AVERAGE DISCHARGE.--50 years, 295 ft³/s (8.354 m³/s), 213,700 acre-ft/yr (263 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,210 ft³/s (90.9 m³/s) Mar. 26 (gage height, 10.10 ft or 3.078 m); minimum daily, 48 ft³/s (1.36 m³/s) Aug. 16-18.

Period of record: Maximum discharge, 14,500 ft³/s (411 m³/s) Feb. 1, 1963 (gage height, 16.19 ft or 4.935 m); minimum, 4.3 ft³/s (0.12 m³/s) Sept. 5, 1934.

REMARKS.--Records good. Diversions for irrigation of about 40,000 acres (162 km²) above station, of which 14,500 acres (58.7 km²) receive supplemental water of about 7,000 acre-ft (8.63 hm³) annually from Little Truckee River. Flow partly regulated by Lake Davis, total usable capacity, 84,000 acre-ft (104 hm³) beginning in November 1966 (see sta 11391490) and by Frenchman Lake, total usable capacity, 53,600 acre-ft (66.1 hm³) beginning in November 1961 (see sta 11391370).

REVISIONS (WATER YEARS).--WSP 1445: 1928, 1930, 1932. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	104	99	87	117	612	709	801	598	195	53	77
2	58	102	97	86	99	985	699	821	564	164	56	69
3	59	104	151	173	107	1170	664	951	571	152	55	64
4	60	103	182	265	71	1130	625	908	561	147	53	61
5	61	101	129	226	65	929	621	895	559	141	52	59
6	62	99	133	285	62	850	648	892	531	137	53	59
7	64	100	146	313	64	941	634	880	512	134	55	61
8	67	101	135	401	76	1260	627	847	481	147	57	61
9	70	98	120	302	148	1460	643	826	454	152	53	61
10	69	96	114	344	141	1270	634	838	432	123	51	82
11	69	96	108	419	131	892	632	862	410	117	53	82
12	68	97	111	390	156	663	644	877	385	112	53	80
13	68	97	111	330	637	560	680	884	360	107	53	84
14	68	97	109	288	368	524	772	927	340	104	51	86
15	68	97	109	269	285	499	721	935	320	102	49	86
16	69	89	110	262	280	532	678	909	300	104	48	85
17	70	85	109	259	297	555	629	917	290	98	48	84
18	71	86	106	262	314	592	623	910	286	92	48	82
19	71	85	104	268	344	846	621	907	283	86	87	80
20	71	86	98	274	365	893	635	896	259	80	80	82
21	70	146	98	275	317	887	705	884	251	74	88	77
22	71	114	95	277	349	500	733	885	244	68	77	77
23	72	109	92	278	318	576	734	886	232	62	76	77
24	72	113	93	278	266	849	994	843	263	56	84	76
25	72	130	90	275	249	2130	1030	830	258	58	91	76
26	74	119	83	282	259	2730	1010	771	249	61	103	76
27	76	112	85	249	335	2850	1060	746	244	61	110	74
28	104	108	85	255	452	1240	930	726	233	55	113	76
29	90	105	81	227	---	908	879	628	216	54	112	74
30	91	101	85	227	---	862	827	593	204	54	101	74
31	100	---	86	212	---	781	---	595	---	52	87	---
TOTAL	2212	3080	3354	8338	6672	31476	22041	26070	10890	3149	2150	2242
MEAN	71.4	103	108	269	238	1015	735	841	363	102	69.4	74.7
MAX	104	146	182	419	637	2850	1060	951	598	195	113	86
MIN	57	85	81	86	62	499	621	593	204	52	48	59
AC-FT	4390	6110	6650	16540	13230	62430	43720	51710	21600	6250	4260	4450

CAL YR 1974 TOTAL 142823 MEAN 391 MAX 3450 MIN 52 AC-FT 283300
WTR YR 1975 TOTAL 121674 MEAN 333 MAX 2850 MIN 48 AC-FT 241300

11392500 MIDDLE FORK FEATHER RIVER NEAR CLIO, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: October 1963 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 25.0°C July 25, 26; minimum, 0.5°C Feb. 2.
Period of record:
Water temperatures: Maximum, 26.5°C July 15-17, 1972: minimum (1963-66, 1968-73, 1974 to current year), freezing point on many days in 1963, 1969, 1971-73.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	10.0	6.5	6.0	3.0	2.5	1.0	1.0	1.0	1.0	4.0	2.5
2	14.0	11.0	6.0	5.5	3.0	2.5	1.0	1.0	1.0	0.5	3.0	2.0
3	14.5	11.5	6.5	5.0	4.0	3.0	1.0	1.0	1.0	1.0	2.5	1.5
4	14.5	11.0	6.0	4.5	4.5	4.0	1.0	1.0	1.0	1.0	3.5	2.0
5	12.5	8.5	5.5	4.5	4.0	3.5	1.0	1.0	2.0	1.0	4.0	3.5
6	12.0	7.5	6.0	4.0	4.0	3.5	1.0	1.0	2.0	1.5	5.5	4.0
7	12.0	7.0	5.0	4.5	3.5	3.0	1.0	1.0	3.5	2.0	5.0	4.0
8	11.5	9.5	6.0	4.5	3.0	2.5	1.0	1.0	3.5	3.0	4.0	2.5
9	13.0	9.5	5.5	4.0	2.5	2.5	1.0	1.0	3.5	2.0	4.5	3.0
10	13.0	8.5	5.5	4.0	2.5	1.5	1.5	1.0	3.0	1.5	4.5	4.5
11	12.0	8.0	5.5	4.0	3.0	2.0	1.5	1.5	3.5	2.0	7.0	4.5
12	12.5	7.5	6.5	3.5	4.0	3.0	1.5	1.0	3.0	2.0	6.5	5.0
13	12.0	7.0	6.5	5.0	4.0	3.0	1.0	1.0	2.0	1.5	6.0	5.0
14	12.0	7.0	7.0	5.5	3.5	3.0	1.0	1.0	2.0	1.5	6.0	4.5
15	12.0	7.0	7.5	5.5	4.5	3.5	1.0	1.0	1.5	1.0	6.5	4.5
16	12.5	7.5	6.0	5.5	4.5	4.0	2.0	1.0	1.0	1.0	6.0	4.5
17	12.0	7.0	5.5	5.0	4.0	3.5	2.0	2.0	1.0	1.0	5.5	4.5
18	12.0	7.0	7.0	5.0	3.5	3.0	2.0	2.0	1.0	1.0	6.5	4.5
19	11.5	7.5	6.0	5.0	3.0	2.5	2.0	2.0	1.5	1.0	6.0	5.0
20	11.0	7.0	5.5	4.0	3.0	2.5	2.0	2.0	2.5	1.0	5.5	4.0
21	10.0	6.5	5.0	4.5	3.5	2.5	2.0	2.0	2.0	1.0	5.0	2.5
22	9.0	5.5	4.5	4.5	3.0	2.0	2.5	2.0	1.0	1.0	2.5	1.5
23	8.5	5.5	4.5	3.5	2.0	1.5	2.5	2.5	2.0	1.0	2.5	2.0
24	9.0	5.5	4.5	3.5	1.5	1.5	3.0	2.5	2.5	1.5	5.0	2.5
25	9.0	6.0	4.5	3.5	1.5	1.5	3.0	3.0	3.0	2.0	4.5	4.0
26	9.5	6.0	4.0	3.5	1.5	1.5	3.0	3.0	3.0	2.5	4.0	3.5
27	8.5	6.5	4.0	3.0	1.5	1.0	3.0	1.5	4.5	3.0	3.5	3.5
28	8.0	6.5	3.5	3.0	1.0	1.0	1.5	1.0	4.5	3.0	3.5	3.5
29	7.0	6.5	3.0	2.5	1.0	1.0	1.0	1.0	---	---	4.5	3.0
30	7.5	6.0	3.0	2.5	1.0	1.0	1.0	1.0	---	---	8.5	4.5
31	7.0	6.5	---	---	1.0	1.0	1.0	1.0	---	---	8.0	6.5
MONTH	15.5	5.5	7.5	2.5	4.5	1.0	3.0	1.0	4.5	0.5	8.5	1.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	5.5	12.5	7.5	16.0	13.0	19.5	13.5	22.0	14.5	19.0	14.0
2	7.0	5.5	12.5	8.0	16.0	11.0	19.5	13.0	23.0	15.5	19.5	13.5
3	6.5	5.5	10.0	7.0	17.5	11.0	20.0	13.0	23.0	16.0	20.0	14.0
4	5.5	4.0	8.5	6.0	18.5	12.0	20.5	14.5	22.5	16.0	20.0	14.5
5	4.0	3.0	8.5	6.0	19.5	13.0	22.0	15.5	22.5	16.5	20.5	14.5
6	4.5	3.0	11.0	6.5	19.5	13.0	23.0	16.0	22.0	16.5	20.5	15.5
7	4.0	3.5	13.0	8.0	19.0	12.5	23.0	16.0	21.5	14.5	20.5	15.5
8	5.5	3.5	14.0	8.5	18.5	12.5	22.5	15.5	22.0	15.5	21.0	16.0
9	9.0	5.0	14.0	9.0	18.5	12.5	23.0	17.5	22.0	15.5	21.0	17.0
10	9.0	6.0	14.0	9.5	19.0	12.5	20.0	16.5	22.5	15.5	19.5	17.5
11	8.5	6.5	14.5	9.5	19.0	13.0	23.5	16.0	22.5	16.0	20.0	16.0
12	9.5	6.0	14.5	9.0	20.0	13.0	23.0	16.0	22.5	16.5	21.0	16.0
13	10.0	6.5	15.5	9.0	20.5	13.5	23.0	16.0	22.5	17.0	20.0	16.0
14	8.5	6.5	15.5	10.0	21.0	14.0	23.0	16.0	22.5	17.0	20.0	15.5
15	8.0	5.5	12.5	10.0	20.5	14.0	19.0	16.5	22.0	17.0	18.5	15.5
16	6.5	5.5	14.5	9.0	20.5	14.0	22.0	16.0	22.0	16.5	19.5	14.5
17	8.0	5.0	16.0	10.5	19.0	13.5	22.5	16.0	20.0	16.5	19.5	14.5
18	9.5	6.0	17.0	11.5	14.5	11.5	23.0	16.0	18.5	16.5	20.0	16.0
19	8.5	7.0	15.0	12.0	14.5	12.0	23.5	16.0	17.5	15.0	19.5	15.5
20	10.0	6.5	11.5	8.5	17.5	13.0	23.5	16.5	19.5	14.0	20.0	15.5
21	10.5	7.0	11.0	7.5	19.0	13.0	23.5	16.5	18.5	15.5	18.5	14.5
22	9.0	7.0	13.5	8.5	19.5	13.0	23.5	17.0	21.0	15.0	18.0	14.0
23	10.0	7.0	16.0	10.5	19.0	14.0	24.0	16.5	21.0	15.5	18.0	13.5
24	8.5	6.0	17.0	11.5	14.5	12.0	24.5	17.5	21.5	16.0	18.0	13.5
25	6.0	5.0	16.0	11.0	16.5	10.5	25.0	18.0	21.5	16.5	18.0	13.5
26	5.5	4.5	15.5	10.5	17.5	11.5	25.0	18.0	21.5	17.0	17.0	13.0
27	8.0	5.0	16.5	11.0	18.0	12.5	24.0	18.0	20.5	17.0	16.5	12.0
28	10.0	7.0	17.0	11.0	19.0	13.0	23.5	18.0	20.0	16.0	16.0	11.5
29	11.5	7.5	17.5	11.5	19.5	14.0	23.0	17.5	19.5	15.0	16.5	11.5
30	11.0	7.5	18.5	11.5	19.0	13.5	21.5	15.5	19.0	15.0	16.0	11.5
31	---	---	19.0	12.5	---	---	21.5	14.5	19.0	14.0	---	---
MONTH	11.5	3.0	19.0	6.0	21.0	10.5	25.0	13.0	23.0	14.0	21.0	11.5

11394500 MIDDLE FORK FEATHER RIVER NEAR MERRIMAC, CALIF.

LOCATION.--Lat 39°42'30", long 121°16'10", in NW¼NE¼ sec.2, T.21 N., R.6 E., Butte County, Plumas National Forest, on left bank 400 ft (122 m) downstream from bridge on Milsap Bar Road, 500 ft (152 m) downstream from Little North Fork, 4.5 mi (7.2 km) southeast of Merrimac, and 20 mi (32 km) northeast of Oroville.

DRAINAGE AREA.--1,062 mi² (2,751 km²).

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,560 ft (475 m), from topographic map. Prior to Jan. 21, 1965, on right bank at same site and datum.

AVERAGE DISCHARGE.--24 years, 1,476 ft³/s (41.80 m³/s), 1,069,000 acre-ft/yr (1.32 km³/yr).

EXTREMES.--Current year: Maximum discharge, 8,500 ft³/s (241 m³/s) Mar. 25 (gage height, 11.55 ft or 3.520 m); minimum daily, 198 ft³/s (5.61 m³/s) Oct. 1, 2.

Period of record: Maximum discharge, 86,200 ft³/s (2,440 m³/s) Dec. 22, 1964 (gage height, 26.5 ft or 8.08 m, from floodmarks, present site), from rating curve extended above 19,000 ft³/s (538 m³/s) on basis of slope-area measurement of maximum flow; minimum, 92 ft³/s (2.61 m³/s) Jan. 2, 1960.

Flood of Dec. 10, 1937, reached a stage of 19.4 ft (5.91 m), from floodmarks (discharge, 46,100 ft³/s or 1,310 m³/s).

REMARKS.--Records good. Diversions above station for irrigation of about 1,000 acres (4.05 km²) between stations near Clio and near Merrimac. Flow partly regulated by Antelope Lake (see sta 11401120) beginning in 1963, Lake Davis (see sta 11391490) beginning in 1966, and Frenchman Lake (see sta 11391370) beginning in 1961.

REVISIONS (WATER YEARS).--WSP 1931, WRD Calif. 1965: 1960, drainage area. WRD Calif. 1968: 1956(M), 1963(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	198	341	327	274	693	1780	2320	2810	5260	1090	358	298
2	198	309	321	269	795	2390	2200	3030	4910	1030	356	283
3	200	292	525	268	588	2680	2130	3840	4720	984	354	275
4	206	285	1180	427	654	2600	2070	4180	4590	948	343	275
5	202	284	652	506	553	2390	1970	3430	4600	909	333	271
6	201	281	505	657	539	2330	1860	3140	4620	881	322	263
7	203	313	463	933	655	2830	1800	3140	4310	856	317	263
8	212	352	452	1690	1100	4490	1730	3360	3770	822	319	259
9	232	308	422	985	2830	4170	1690	3760	3450	827	321	255
10	239	290	389	790	2120	3520	1740	4160	3230	771	313	255
11	231	283	377	788	1460	2820	1730	4710	3060	720	298	317
12	223	279	384	788	1620	2250	1750	5050	2960	700	295	302
13	216	279	455	735	4790	1980	1860	5240	2880	662	288	292
14	216	277	412	677	3310	1780	2130	5730	2820	630	287	285
15	216	275	394	643	2010	1700	2080	5860	2740	626	284	287
16	216	271	381	627	1590	1680	1940	5340	2620	672	279	284
17	212	262	377	614	1340	1630	1830	5460	2440	633	270	279
18	212	295	366	615	1230	1910	1770	5700	2150	606	358	279
19	212	296	353	627	1430	3690	1790	5970	1910	578	433	279
20	214	272	343	633	1850	3800	1800	5560	1760	552	417	276
21	216	465	347	640	1490	3090	2030	4560	1700	531	360	273
22	215	656	351	640	1320	2620	2270	4250	1630	509	379	267
23	215	435	319	636	1260	2120	2260	4440	1550	484	351	267
24	216	384	270	643	1190	2410	3380	4820	1590	465	321	263
25	218	443	290	653	1130	6850	4670	4990	1500	448	317	266
26	220	434	312	684	1140	5920	3480	4670	1360	429	320	261
27	229	387	395	667	1200	5440	3160	4770	1270	407	328	258
28	425	364	376	576	1490	4060	3000	4900	1230	394	335	260
29	380	349	320	608	---	2820	2830	4990	1190	380	340	265
30	290	338	299	542	---	2590	2800	4960	1140	371	333	263
31	330	---	316	577	---	2570	---	5150	---	367	315	---
TOTAL	7213	10099	12673	20412	41377	92910	68070	141970	82960	20290	10242	8220
MEAN	233	337	409	658	1478	2997	2269	4580	2765	655	330	274
MAX	425	656	1180	1690	4790	6850	4670	5970	5260	1090	433	317
MIN	198	262	270	268	539	1630	1690	2810	1140	367	270	255
AC-FT	14310	20030	25140	40490	82070	184300	135000	281600	164600	40250	20320	16300

CAL YR 1974 TOTAL 700665 MEAN 1920 MAX 18000 MIN 191 AC-FT 1390000
WTR YR 1975 TOTAL 516436 MEAN 1415 MAX 6850 MIN 198 AC-FT 1024000

Peak discharge (base, 7,000 ft³/s).--Mar. 25 (1000) 8,500 ft³/s (11.46 ft).

11394500 MIDDLE FORK FEATHER RIVER NEAR MERRIMAC, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: July 1963 to June 1966, May 1970 to September 1971, water year 1972 (partial-record station).
Water temperatures: October 1962 to current year.
Sediment records: Water years 1970-72 (partial-record station).
EXTREMES.--Current year:
Water temperatures: Maximum, 20.5°C July 24-27; minimum, freezing point Jan. 31, Feb. 1
Period of record:
Water temperatures: Maximum (1964 to current year), 24.0°C Aug. 3, 1966, July 17, 18, 1972; minimum (1962-64, 1965 to current year) freezing point Jan. 31, Feb. 1, 1975.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	14.0	9.5	9.0	4.5	4.0	1.5	1.0	1.0	0.0	7.0	6.0
2	15.5	14.5	9.0	8.5	4.5	4.0	1.5	1.0	1.5	1.0	6.5	6.0
3	16.0	15.0	8.5	8.0	5.5	4.5	1.5	1.0	1.5	1.5	6.0	5.0
4	16.0	15.0	8.0	7.5	6.5	5.5	2.0	1.5	2.0	1.5	5.5	5.0
5	15.0	14.0	8.0	8.0	6.5	6.0	2.5	2.0	2.0	2.0	6.0	5.5
6	14.0	13.0	8.0	7.5	6.5	6.0	3.0	2.5	2.5	2.0	6.5	6.0
7	13.5	12.5	8.0	8.0	6.5	6.0	3.5	3.0	3.0	2.5	6.5	6.0
8	14.0	13.0	8.0	7.5	6.0	5.5	3.5	3.0	3.5	2.5	6.0	6.0
9	13.5	12.5	8.0	7.5	5.5	5.0	3.5	3.0	3.5	3.0	6.0	6.0
10	13.5	12.5	7.5	7.5	5.0	4.5	3.0	3.0	4.5	3.5	7.0	6.0
11	13.5	12.5	8.0	7.5	5.0	4.5	3.5	3.0	5.0	4.0	7.5	7.0
12	13.0	12.5	8.0	7.5	5.5	5.0	3.5	3.0	5.0	4.5	7.5	6.5
13	13.0	12.0	8.0	7.5	6.0	5.5	3.0	3.0	5.0	4.5	7.0	6.0
14	12.5	12.0	8.0	8.0	6.0	5.5	3.0	2.5	4.5	4.0	6.0	5.5
15	12.5	11.5	8.0	8.0	6.0	5.5	3.0	2.5	4.0	3.5	6.5	5.5
16	12.5	11.5	8.0	8.0	6.0	5.5	3.5	2.5	4.0	3.5	5.5	5.0
17	12.5	11.5	8.0	8.0	6.0	5.5	3.5	3.0	3.5	3.0	5.5	5.0
18	12.5	11.5	8.0	8.0	5.5	5.0	4.0	3.5	3.0	3.0	7.0	5.5
19	12.5	11.5	8.0	7.5	5.0	5.0	5.0	4.0	3.5	3.0	7.0	6.0
20	12.5	11.5	7.5	7.0	5.0	5.0	5.0	5.0	3.5	3.0	6.5	6.0
21	11.5	11.0	7.5	7.0	5.0	5.0	5.0	4.0	3.5	3.0	6.0	3.5
22	11.0	10.5	7.5	7.0	5.0	4.0	4.5	4.0	3.0	3.0	4.0	3.0
23	10.5	10.0	7.0	6.5	4.0	3.0	4.5	4.0	3.5	3.0	5.5	4.0
24	10.5	10.0	6.5	6.0	3.0	2.5	5.0	4.0	4.5	3.5	6.0	5.5
25	10.5	10.0	6.5	6.0	3.0	2.5	5.0	4.5	5.0	4.5	6.0	5.5
26	11.0	10.5	6.5	6.0	3.0	3.0	5.5	4.5	6.0	5.0	5.5	5.0
27	10.5	10.0	6.0	5.5	3.0	3.0	5.0	3.0	6.5	6.0	5.0	4.5
28	10.5	10.0	5.5	5.5	3.0	2.0	3.0	2.0	7.0	6.5	5.0	4.0
29	10.0	9.5	5.5	5.0	2.0	1.5	2.0	1.5	---	---	6.0	4.5
30	9.5	9.0	5.0	4.5	2.0	1.5	1.5	0.5	---	---	7.5	6.0
31	9.5	9.5	---	---	2.0	1.5	1.0	0.0	---	---	7.5	7.0
MONTH	16.0	9.0	9.5	4.5	6.5	1.5	5.5	0.0	7.0	0.0	7.5	3.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	6.0	9.5	9.0	12.0	10.0	15.0	14.0	18.5	17.0	17.5	16.5
2	7.0	6.0	9.5	9.0	12.0	10.0	15.0	14.0	18.5	17.5	17.5	16.0
3	7.0	6.0	9.5	8.0	11.0	10.0	15.5	14.5	19.0	17.5	18.0	16.0
4	6.0	4.5	8.0	6.5	11.5	10.0	16.0	15.0	19.5	18.0	18.0	16.5
5	5.0	4.0	8.0	6.5	12.0	11.0	17.0	16.0	19.5	18.0	18.5	17.0
6	5.5	5.0	9.5	7.5	12.0	11.0	17.5	16.5	19.0	18.0	18.5	17.5
7	6.0	5.5	11.0	9.5	12.0	11.0	18.0	17.0	19.0	17.0	19.0	17.5
8	6.0	6.0	11.5	10.5	12.0	11.0	18.0	17.5	19.0	17.5	19.0	18.0
9	7.0	6.0	11.5	10.0	12.0	11.0	18.0	17.5	19.0	17.5	19.0	18.0
10	8.0	6.5	11.0	10.0	12.0	11.0	18.0	18.0	19.5	17.5	18.5	18.0
11	8.5	7.5	11.0	10.0	12.5	12.0	18.0	17.5	19.5	17.5	18.5	17.5
12	8.5	8.0	11.0	9.0	13.0	12.0	18.5	18.0	19.5	18.0	18.5	17.5
13	9.0	8.0	10.5	9.0	13.5	13.0	19.0	18.0	19.5	18.0	18.5	18.0
14	9.0	7.5	10.5	9.0	14.0	13.0	19.0	18.0	19.5	18.0	18.5	18.0
15	7.5	6.5	10.5	9.0	14.0	13.5	18.5	17.0	19.5	18.0	18.5	17.5
16	7.0	6.0	10.5	9.0	14.5	14.0	18.0	17.0	19.5	18.0	18.0	17.5
17	7.0	6.0	11.0	9.5	14.0	13.5	18.0	17.5	19.0	18.0	18.0	17.0
18	8.0	7.0	11.0	10.0	13.5	11.5	19.0	18.0	18.0	17.5	18.5	17.0
19	9.0	8.0	11.0	10.0	12.5	11.5	19.5	18.0	17.5	17.0	18.5	17.5
20	9.0	8.5	10.0	8.0	13.5	12.0	19.5	18.0	17.5	16.0	19.0	18.0
21	9.5	9.0	10.0	8.0	15.0	13.5	19.5	18.5	18.0	17.0	18.5	17.5
22	9.5	9.0	11.0	9.5	15.0	14.0	19.5	18.5	18.0	17.0	18.0	17.0
23	9.0	8.5	12.0	10.5	15.0	14.5	20.0	18.5	18.5	17.5	17.5	17.0
24	9.0	7.5	12.0	10.5	14.5	12.5	20.5	19.0	18.5	17.5	17.5	16.5
25	7.5	6.0	11.5	9.5	12.5	11.0	20.5	19.5	19.0	18.0	17.5	16.5
26	6.5	6.0	11.0	10.0	14.0	12.5	20.5	19.0	19.5	18.5	17.0	16.0
27	8.0	6.5	11.0	10.0	14.5	13.5	20.5	18.5	19.0	18.5	16.5	15.5
28	9.0	8.0	11.0	10.0	15.0	14.0	20.0	19.0	18.5	18.0	16.0	15.0
29	9.0	8.5	11.0	10.0	15.5	14.5	20.0	19.0	18.0	16.5	15.5	14.5
30	9.5	9.0	11.5	9.5	15.5	14.5	19.5	18.0	17.5	16.5	15.5	14.5
31	---	---	12.0	10.5	---	---	18.5	17.5	17.5	16.5	---	---
MONTH	9.5	4.0	12.0	6.5	15.5	10.0	20.5	14.0	19.5	16.0	19.0	14.5

11394620 FALL RIVER NEAR FEATHER FALLS, CALIF.

LOCATION.--Lat 39°40'00", long 121°08'01", in SW¼NW¼ sec.19, T.21 N., R.8 E., Plumas County, on right bank 0.5 mi (0.8 km) downstream from Coyote Creek, and 8 mi (13 km) northeast of Feather Falls.

DRAINAGE AREA.--9.89 mi^2 (25.62 km^2).

PERIOD OF RECORD.--July 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,000 ft (1,219 m), from topographic map.

AVERAGE DISCHARGE.--12 years, 46.9 ft^3/s (1.328 m^3/s), 33,980 acre-ft/yr (41.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,800 ft^3/s (51.0 m^3/s) Feb. 9 (gage height, 7.29 ft or 2.222 m); minimum daily, 1.8 ft^3/s (0.051 m^3/s) Oct. 1, 2, 5-8, 13-24.

Period of record: Maximum discharge, 3,770 ft^3/s (107 m^3/s) Dec. 22, 1964 (gage height, 10.00 ft or 3.048 m), from rating curve extended above 200 ft^3/s (5.66 m^3/s) on basis of slope-area measurement of maximum flow; minimum daily, 1.4 ft^3/s (0.040 m^3/s) Aug. 23-25, 1970.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	3.4	2.7	3.6	36	47	85	105	196	19	3.9	4.1
2	1.8	2.6	2.9	4.2	78	62	79	116	180	18	5.0	4.1
3	1.9	2.4	23	3.6	102	65	75	154	168	17	8.2	3.9
4	1.9	2.4	26	3.6	129	62	71	159	160	17	6.0	3.8
5	1.8	2.3	9.9	3.6	116	62	66	138	154	16	6.2	3.6
6	1.8	2.3	7.2	3.9	100	74	60	127	147	15	5.4	3.6
7	1.8	3.9	6.1	4.1	110	106	56	126	131	14	4.6	3.5
8	1.8	3.7	5.3	4.3	155	143	53	135	117	14	4.6	3.4
9	2.0	3.0	5.0	4.3	878	123	50	149	106	13	4.6	3.4
10	2.0	2.7	4.8	4.3	504	103	49	162	96	13	4.6	4.0
11	1.9	2.6	4.5	4.3	109	89	47	188	88	12	4.3	4.0
12	1.9	2.5	5.6	3.9	53	78	48	208	80	12	4.2	3.7
13	1.8	2.4	5.6	3.7	105	71	50	225	73	11	4.5	3.6
14	1.8	2.4	5.3	4.7	89	64	54	243	67	11	4.6	3.4
15	1.8	2.4	5.0	4.8	67	59	50	240	61	12	4.5	3.4
16	1.8	2.3	4.8	4.4	55	55	48	227	55	12	4.4	3.2
17	1.8	2.3	4.5	5.3	47	50	46	231	50	11	4.4	3.2
18	1.8	4.0	4.3	8.2	42	53	46	246	44	10	8.1	3.2
19	1.8	2.9	4.3	8.7	52	132	45	255	40	9.9	9.1	3.2
20	1.8	2.6	4.1	8.7	59	126	48	226	37	9.6	6.8	3.2
21	1.8	9.5	4.5	8.8	48	110	55	190	35	9.2	6.0	3.0
22	1.8	7.2	4.8	9.5	43	94	59	175	32	8.7	6.8	2.9
23	1.8	4.3	4.3	9.6	40	81	61	176	30	8.7	5.4	2.9
24	1.8	3.6	4.1	10	39	97	117	188	34	8.4	5.0	2.8
25	1.9	5.0	3.8	10	38	255	146	192	30	8.2	4.8	2.7
26	1.9	4.1	3.8	11	38	181	120	189	27	7.4	4.6	2.7
27	2.1	3.5	3.6	12	39	144	107	192	25	6.8	4.5	2.6
28	6.0	3.2	4.5	12	42	120	102	199	23	6.2	4.4	2.6
29	2.9	2.9	5.0	12	---	105	101	206	22	5.6	4.4	2.6
30	2.4	2.8	4.1	12	---	98	102	203	20	5.0	4.3	2.6
31	4.7	---	3.6	11	---	93	---	203	---	4.8	4.2	---
TOTAL	65.9	101.2	187.0	214.1	3213	3002	2096	5773	2328	345.5	162.4	98.9
MEAN	2.13	3.37	6.03	6.91	115	96.8	69.9	186	77.6	11.1	5.24	3.30
MAX	6.0	9.5	26	12	878	255	146	255	196	19	9.1	4.1
MIN	1.8	2.3	2.7	3.6	36	47	45	105	20	4.8	3.9	2.6
AC-FT	131	201	371	425	6370	5950	4160	11450	4620	685	322	196

CAL YR 1974 TOTAL 19474.3 MEAN 53.4 MAX 758 MIN 1.8 AC-FT 38630
WTR YR 1975 TOTAL 17587.0 MEAN 48.2 MAX 878 MIN 1.8 AC-FT 34880

Peak discharge (base, 180 ft^3/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-9	0830	7.29	1,800	4-24	1800	3.31	202
3-19	1400	3.28	196	5-3	1630	3.25	190
3-25	0430	3.78	305	5-18	1930	3.67	278

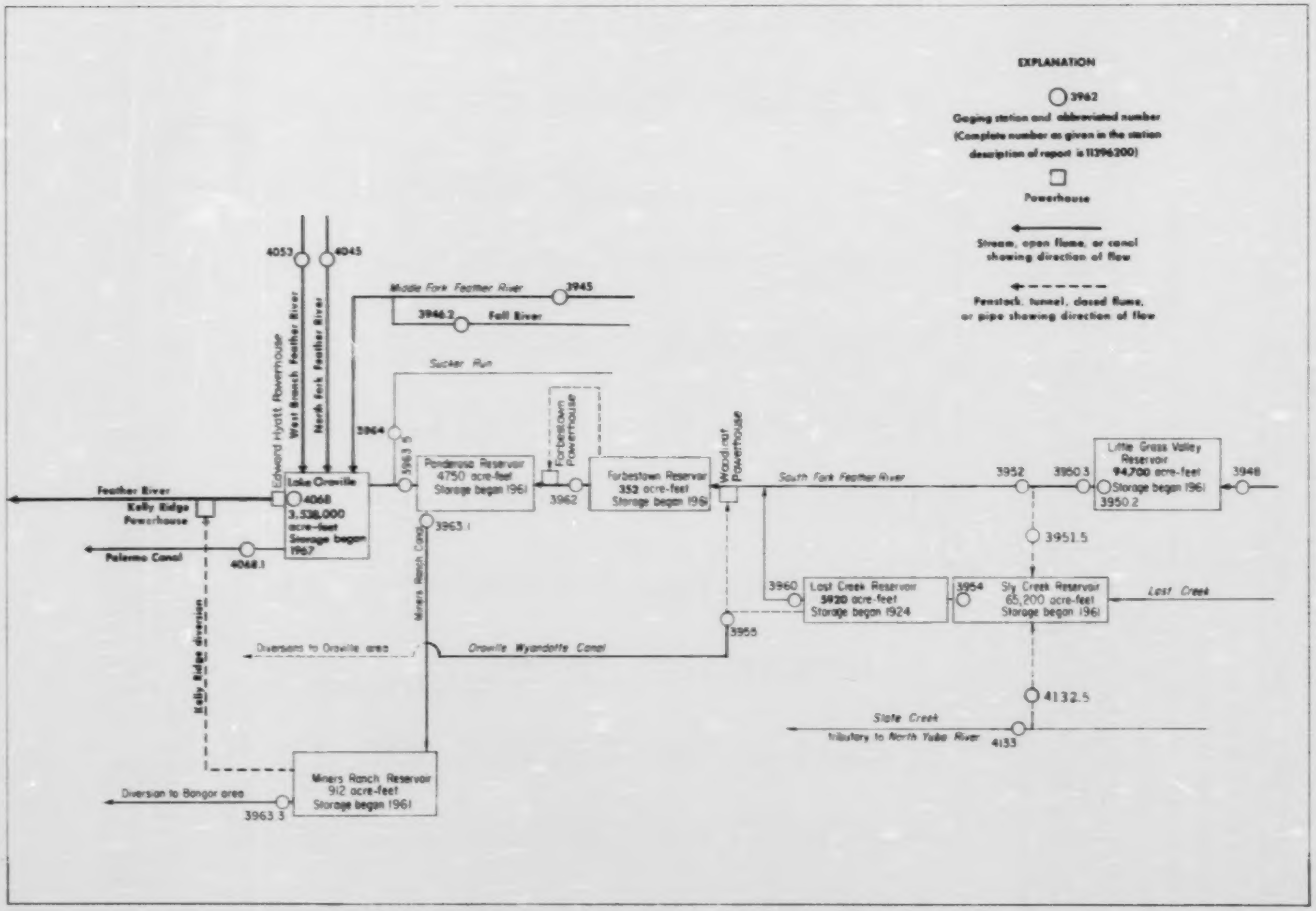

EXPLANATION
3962
Gaging station and abbreviated number (Complete number as given in the station description of report is 11396200)
Powerhouse
Stream, open flume, or canal showing direction of flow
Penstock, tunnel, closed flume, or pipe showing direction of flow
4053
4045
West Branch Feather River
North Fork Feather River
Edward Hyatt Powerhouse
Middle Fork Feather River
3945
3946.2
Fall River
Sucker Run
3964
3963.5
Lake Oroville
4068
3,538,000 acre-feet
Storage began 1967
Feather River
Kelly Ridge Powerhouse
Palermo Canal
4068.1
Kelly Ridge diversion
Ponderosa Reservoir
4750 acre-feet
Storage began 1961
3963.1
Miners Ranch Canal
Forbestown Powerhouse
3962
Forbestown Reservoir
352 acre-feet
Storage began 1961
Woodleaf Powerhouse
South Fork Feather River
3952
3950.3
Little Grass Valley Reservoir
94,700 acre-feet
Storage began 1961
3950.2
3948
3951.5
3960
Lost Creek Reservoir
5920 acre-feet
Storage began 1924
3954
Sly Creek Reservoir
65,200 acre-feet
Storage began 1961
Lost Creek
3955
Diversions to Oroville area
Oroville Wyandotte Canal
4132.5
State Creek
tributary to North Yuba River
4133
Miners Ranch Reservoir
912 acre-feet
Storage began 1961
Diversion to Bangor area
3963.3

FIGURE 5.--Schematic diagram showing diversions and storage in South Fork Feather River basin.

11394800 SOUTH FORK FEATHER RIVER ABOVE LITTLE GRASS VALLEY RESERVOIR, CALIF.

LOCATION.--Lat 39°45'07", long 120°57'26", in NW¼SE¼ sec.22, T.22 N., R.9 E., Plumas County, Plumas National Forest, on right bank 0.5 mi (0.8 km) downstream from unnamed tributary, 4.5 mi (7.2 km) upstream from Little Grass Valley Dam, and 5 mi (8 km) north of La Porte.

DRAINAGE AREA.--8.09 mi² (20.95 km²).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,080 ft (1,548 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 32.0 ft³/s (0.906 m³/s), 23,180 acre-ft/yr (28.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,820 ft³/s (51.5 m³/s) Feb. 9 (gage height, 5.69 ft or 1.734 m); minimum daily, 0.15 ft³/s (0.004 m³/s) Oct. 1-4.

Period of record: Maximum discharge, 4,160 ft³/s (118 m³/s) Jan. 31, 1963 (gage height, 7.12 ft or 2.170 m), from rating curve extended above 140 ft³/s (3.96 m³/s) on basis of slope-area measurement at gage height 5.47 ft (1.667 m); minimum daily, 0.02 ft³/s (0.0006 m³/s) Sept. 18, 1974.

REMARKS.--Records good. No storage or diversion above station. See schematic diagram of South Fork Feather River basin.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1966(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	3.0	2.2	.95	13	14	21	40	241	27	.95	.69
2	.15	2.2	2.5	.95	13	15	20	48	230	23	1.6	.89
3	.15	2.0	9.8	.83	11	17	20	60	216	21	2.5	.81
4	.15	1.8	15	.83	9.2	17	18	62	212	20	1.8	.72
5	.20	1.6	4.8	.95	7.4	17	18	53	226	19	1.8	.61
6	.20	1.6	3.4	1.2	5.9	18	17	51	230	17	1.6	.64
7	.20	1.8	2.8	3.0	7.4	20	16	55	202	16	1.4	.71
8	.20	2.5	2.5	4.9	141	22	15	64	176	14	1.4	.69
9	.30	2.2	2.2	3.7	1390	21	14	79	163	13	1.4	.72
10	.35	2.2	2.0	2.8	1380	20	14	95	157	11	1.4	1.5
11	.47	2.2	2.0	2.5	653	18	14	114	154	11	1.2	1.9
12	.95	2.2	2.8	2.2	189	17	14	131	142	9.2	1.2	1.6
13	.63	2.2	4.1	2.2	222	17	15	148	142	8.0	1.1	1.4
14	.63	2.2	3.0	2.8	18	15	18	179	139	7.4	1.1	1.2
15	.63	2.2	3.0	2.8	17	14	17	176	133	7.4	1.4	1.1
16	.63	2.0	2.8	3.0	14	14	16	163	120	8.0	1.4	1.1
17	.55	1.8	2.8	3.0	13	13	15	176	102	6.9	1.4	1.2
18	.55	2.5	2.2	3.4	11	13	16	195	81	5.9	2.7	1.3
19	.63	2.5	2.2	4.1	11	20	16	208	66	4.9	2.8	1.4
20	.63	2.2	2.0	4.5	11	20	17	176	62	4.9	2.4	1.5
21	.73	8.5	2.0	4.9	9.9	18	19	133	60	4.5	2.0	1.5
22	.83	5.9	1.8	4.9	9.2	17	22	122	57	4.1	2.0	1.5
23	.95	3.7	1.6	4.9	8.6	14	23	136	53	3.4	1.6	1.3
24	.83	3.0	2.0	4.9	8.6	18	38	163	44	3.0	1.4	1.0
25	.95	3.0	1.8	5.9	8.6	51	40	172	40	3.0	1.3	.78
26	1.1	2.8	1.6	6.4	9.2	34	34	169	36	2.5	1.3	.30
27	1.2	2.8	1.2	5.9	9.9	29	32	185	32	2.2	1.2	.30
28	6.3	2.5	2.8	5.4	12	26	34	192	31	2.0	1.1	.30
29	3.4	2.5	2.5	4.9	---	23	34	208	30	1.8	.90	.30
30	2.2	2.5	1.6	4.9	---	22	37	216	29	1.4	.88	.47
31	3.4	---	1.1	5.9	---	23	---	241	---	1.4	.71	---
TOTAL	30.24	80.1	94.1	109.51	4212.9	617	644	4210	3606	283.9	46.86	29.43
MEAN	.98	2.67	3.04	3.53	150	19.9	21.5	136	120	9.16	1.51	.98
MAX	6.3	8.5	15	6.4	1390	51	40	241	241	27	2.8	1.9
MIN	.15	1.6	1.1	.83	5.9	13	14	40	29	1.4	.71	.30
AC-FT	60	159	187	217	8360	1220	1280	8350	7150	563	93	58

CAL YR 1974 TOTAL 14911.83 MEAN 40.9 MAX 418 MIN .02 AC-FT 29580
WTR YR 1975 TOTAL 13964.04 MEAN 38.3 MAX 1390 MIN .15 AC-FT 27700

Peak discharge (base, 140 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-9	0930	5.69	1,820	5-18	2100	3.23	241
2-12	2100	4.05	640	5-31	1800	3.38	296

11395020 LITTLE GRASS VALLEY RESERVOIR NEAR LA PORTE, CALIF.

LOCATION.--Lat 39°43'25", long 121°01'10", in SE¼NW¼ sec.31, T.22 N., R.9 E., Plumas County, Plumas National Forest, on right bank 300 ft (91 m) upstream from dam on South Fork Feather River, 3.3 mi (5.3 km) northwest of La Porte.

DRAINAGE AREA.--25.8 mi² (66.8 km²).

PERIOD OF RECORD.--October 1961 to current year. Monthend elevation and contents only October 1961 to October 1962.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Oroville-Wyandotte Irrigation District). Prior to Nov. 1, 1962, in valve chamber in dam at same datum.

EXTREMES.--Current year: Maximum contents, 94,700 acre-ft (117 hm³) June 25 (elevation, 5,047.0 ft or 1,538.33 m); minimum, 45,100 acre-ft (55.6 hm³) Nov. 13, 14.
Period of record: Maximum contents, 96,100 acre-ft (118 hm³) Apr. 29, 1965 (elevation, 5,047.9 ft or 1,538.60 m); minimum since reservoir first filled, 44,400 acre-ft (54.7 hm³) Dec. 5, 1972 (elevation, 5,010.0 ft or 1,527.05 m).

REMARKS.--Reservoir is formed by rockfill dam. Storage began in October 1961. Total capacity, 93,000 acre-ft (115 hm³) between elevations 4,876 ft (1,486.2 m), invert of release valve and 5,047 ft (1,538.3 m), top of spillway gates, all of which is usable. Water is released down South Fork Feather River for power development and irrigation downstream. Records, including extremes, represent contents at 2400 hours. See schematic diagram of South Fork Feather River basin.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,000	34,600
5,010	44,400
5,020	55,900
5,030	68,900
5,040	83,500
5,048	96,300

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60600	48600	45700	46700	48600	53700	63600	64200	87000	94500	89800	72400
2	60300	48100	45700	46700	48300	53900	63700	64300	87900	94500	89300	71800
3	59800	47800	46200	46700	48600	54200	64100	64700	88900	94500	89000	71100
4	59400	47400	46400	46700	48600	54300	64300	65000	89300	94500	88400	70600
5	59000	47100	46400	46700	48600	54400	64600	65200	90000	94500	87900	69900
6	58600	46600	46400	46800	48700	54700	64900	65500	90300	94500	87400	69300
7	58100	46400	46400	47100	48800	55200	65000	65900	90600	94500	87000	68800
8	57700	46200	46400	47300	49100	55500	65100	66300	90700	94500	86300	68100
9	57300	45900	46400	47400	49800	55900	65200	66700	90900	94500	85700	67600
10	56900	45700	46400	47400	50000	56100	65000	67200	91200	94300	85100	66900
11	56400	45400	46400	47400	50500	56300	64900	67800	91900	94500	84400	66400
12	56000	45200	46500	47400	51100	56400	64700	68600	92700	94300	84000	65900
13	55600	45100	46500	47400	51400	56800	64600	69500	93200	94300	83400	65400
14	55300	45100	46500	47400	51900	56900	64500	70500	93200	94200	82800	64700
15	54800	45200	46500	47400	52000	57200	64300	71500	93000	94200	82200	64200
16	54500	45200	46500	47400	52200	57300	64200	72500	93000	94200	81600	63700
17	54200	45300	46500	47400	52300	57600	64100	73600	93000	94200	81000	63000
18	53700	45400	46500	47500	52500	58000	63900	74700	93200	94200	80600	62500
19	53400	45500	46500	47500	52700	58500	63800	75700	93500	94000	80100	61900
20	52900	45500	46500	47600	52800	58700	63700	76600	93800	94000	79500	61300
21	52600	45600	46500	47600	52800	59400	63600	77200	94000	94000	79000	60700
22	52200	45700	46500	47600	52900	59700	63400	77800	94300	93800	78400	60200
23	51900	45700	46500	47600	53000	59900	63300	78400	94300	93500	77800	59500
24	51400	45700	46500	47600	53200	60400	63700	79100	94500	93000	77200	58900
25	51000	45700	46500	47800	53400	61300	63800	80000	94700	92700	76600	58400
26	50600	45700	46500	47800	53400	61900	63900	80700	94500	92200	76000	57700
27	50300	45700	46700	47800	53500	62300	63900	81400	94500	91900	75500	57100
28	50000	45700	46700	47800	53600	62500	64100	82500	94500	91400	74900	56500
29	49600	45700	46700	47900	---	62900	64100	83500	94500	90900	74100	55900
30	49200	45700	46700	48000	---	63000	64100	84600	94500	90400	73600	55200
31	49000	---	46700	48000	---	63300	---	85700	---	90100	73000	---
MAX	60600	48600	46700	48000	53600	63300	65200	85700	94700	94500	89800	72400
MIN	49000	45100	45700	46700	48300	53700	63300	64200	87000	90100	73000	55200
(a)	5,014.0	5,011.1	5,012.0	5,013.1	5,018.0	5,025.7	5,026.3	5,041.4	5,046.9	5,044.2	5,032.8	5,019.4
(b)	-12,000	-3,300	+1,000	+1,300	+5,600	+9,700	+800	+21,600	+8,800	-4,400	-17,100	-17,800

CAL YR 1974 b -19,800
WTR YR 1975 b -5,800

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11395030 SOUTH FORK FEATHER RIVER BELOW LITTLE GRASS VALLEY DAM, CALIF.

LOCATION.--Lat 39°43'26", long 121°01'16", in SW¼NW¼ sec.31, T.22 N., R.9 E., Plumas County, Plumas National Forest, on left bank 0.1 mi (0.2 km) downstream from Little Grass Valley Dam, 0.7 mi (1.1 km) downstream from Ice Creek, and 3.5 mi (5.6 km) northwest of La Porte.

DRAINAGE AREA.--25.9 mi^2 (67.1 km^2).

PERIOD OF RECORD.--October 1927 to September 1933 (published as "near La Porte"), October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,809.0 ft (1,465.78 m) above mean sea level. Prior to Oct. 1, 1960, at site 0.4 mi (0.6 km) upstream at different datum. Oct. 1, 1960, to Oct. 30, 1962, at present site and datum. Nov. 1, 1962, to May 31, 1966, at site on outlet works at base of Little Grass Valley Dam 0.1 mi (0.2 km) upstream at datum 4,850.00 ft (1,478.280 m) above mean sea level.

AVERAGE DISCHARGE (adjusted for change in contents in Little Grass Valley Reservoir).--21 years, 99.4 ft^3/s (2.815 m^3/s), 72,020 acre-ft/yr (88.8 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 930 ft^3/s (26.3 m^3/s) May 27 (gage height, 10.75 ft or 3.277 m); minimum daily, 8.8 ft^3/s (0.25 m^3/s) June 22, 23.

Period of record: Maximum discharge, 4,250 ft^3/s (120 m^3/s) Feb. 1, 1963; minimum, 0.2 ft^3/s (0.006 m^3/s) Oct. 28-31, Nov. 2, 1961.

REMARKS.--Records good. Flow regulated by Little Grass Valley Reservoir (see sta 11395020) beginning in October 1961. No diversion above station. See schematic diagram of South Fork Feather River basin.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	175	193	11	10	10	12	12	149	155	38	198	296
2	175	191	11	10	10	12	12	149	155	38	198	299
3	175	191	12	10	10	12	12	151	225	38	198	299
4	186	191	13	10	10	12	12	151	329	38	198	299
5	198	156	11	10	10	12	12	115	490	38	228	299
6	198	134	11	10	11	12	11	81	394	38	262	299
7	198	134	11	11	11	12	11	81	406	38	278	299
8	198	132	11	12	12	12	11	82	398	38	296	302
9	198	132	11	11	15	12	87	82	398	38	296	302
10	198	132	11	11	13	12	147	84	212	37	296	302
11	198	132	11	11	12	12	147	85	14	37	296	302
12	198	64	11	11	12	12	147	86	12	37	255	302
13	198	11	11	11	13	12	147	86	126	37	248	302
14	198	11	11	11	13	11	147	87	297	37	302	302
15	198	11	11	11	12	11	149	87	306	37	299	302
16	198	11	11	11	12	11	149	87	290	37	299	302
17	198	11	11	11	12	11	149	88	153	37	299	302
18	196	11	11	11	12	11	149	90	9.8	37	299	302
19	196	11	11	11	12	14	149	119	9.5	37	259	302
20	196	11	11	11	12	13	149	151	9.2	37	296	302
21	196	12	11	11	12	12	149	149	9.0	37	296	302
22	196	11	11	11	12	12	149	149	8.8	113	296	302
23	193	11	11	11	12	12	149	151	8.8	175	296	299
24	193	11	11	11	12	12	149	151	28	190	296	296
25	193	11	11	11	12	18	149	151	84	198	296	296
26	193	11	11	11	12	14	149	151	115	198	299	296
27	193	11	11	10	12	13	149	161	84	198	299	296
28	193	11	11	10	12	13	149	155	63	198	299	293
29	193	11	11	10	---	12	149	155	63	198	296	293
30	193	11	11	10	---	12	149	155	48	198	296	293
31	193	---	10	10	---	12	---	155	---	198	296	---
TOTAL	6002	1981	343	331	330	380	3299	3774	4900.1	2650	8565	8982
MEAN	194	66.0	11.1	10.7	11.8	12.3	110	122	163	85.5	276	299
MAX	198	193	13	12	15	18	149	161	490	198	302	302
MIN	175	11	10	10	10	11	11	81	8.8	37	198	293
AC-FT	11900	3930	680	657	655	754	6540	7490	9720	5260	16990	17820

CAL YR 1974 TOTAL 60836.0 MEAN 167 MAX 1370 MIN 10 AC-FT 120700 MEAN a 139 AC-FT a 100,900
WTR YR 1975 TOTAL 41537.1 MEAN 114 MAX 490 MIN 8.8 AC-FT 82390 MEAN a 106 AC-FT a 76,590

a Adjusted for change in contents in Little Grass Valley Reservoir.

11395200 SOUTH FORK FEATHER RIVER BELOW DIVERSION DAM, NEAR STRAWBERRY VALLEY, CALIF.

LOCATION.--Lat 39°38'51", long 121°07'04", in NE¼SE¼ sec.30, T.21 N., R.8 E., Plumas County, Plumas National Forest, on right bank 0.1 mi (0.2 km) downstream from diversion dam, 3.1 mi (5.0 km) upstream from Rock Creek, and 5.8 mi (9.3 km) north of Strawberry Valley.

DRAINAGE AREA.--37.7 mi^2 (97.6 km^2).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder and since Nov. 7, 1962, concrete control. Datum of gage is 3,535.02 ft (1,077.474 m) above mean sea level (levels by Oroville-Wyandotte Irrigation District).

AVERAGE DISCHARGE (adjusted for diversion to South Fork tunnel).--15 years, 160 ft^3/s (4.531 m^3/s), 115,900 acre-ft/yr (143 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 656 ft^3/s (18.6 m^3/s) Apr. 18 (gage height, 5.84 ft or 1.780 m); minimum daily, 3.2 ft^3/s (0.091 m^3/s) Feb. 21, 22, 24, 25.

Period of record: Maximum discharge, 6,330 ft^3/s (179 m^3/s) Jan. 31, 1963 (gage height, 13.21 ft or 4.026 m), from rating curve extended above 700 ft^3/s (19.8 m^3/s) on basis of computation of peak flow over diversion dam; minimum daily, 0.3 ft^3/s (0.008 m^3/s) Dec. 25, 1962, to Jan. 2, 1963, Mar. 1-3, 1963.

REMARKS.--Records good. Flow regulated by Little Grass Valley Reservoir (see sta 11395020). South Fork diversion tunnel, maximum capacity, about 600 ft^3/s (17.0 m^3/s) 500 ft (152 m) upstream, diverts to Sly Creek Reservoir (see sta 11395400); diversion began in November 1961. See schematic diagram of South Fork Feather River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	9.6	4.1	4.1	5.3	3.4	4.3	7.2	9.0	8.1	8.3	9.2
2	12	5.9	4.1	4.1	5.3	3.6	4.3	9.1	9.0	8.1	8.3	9.5
3	12	5.9	4.5	4.3	5.1	3.6	4.3	11	9.2	8.1	8.3	9.5
4	12	5.9	4.3	4.3	4.5	3.8	4.3	11	9.0	8.1	8.3	9.5
5	12	5.9	4.1	4.3	4.1	3.6	4.3	11	9.0	8.1	8.3	9.5
6	12	5.9	4.1	4.5	4.0	3.6	4.3	11	10	8.1	8.3	9.5
7	12	5.9	4.1	4.5	4.0	4.0	4.3	11	17	8.1	8.3	9.5
8	12	5.9	4.1	4.7	4.0	4.1	4.3	10	13	8.1	8.3	9.2
9	12	5.9	4.1	4.3	4.1	4.0	4.3	11	12	8.1	8.3	9.2
10	12	5.9	4.1	4.1	4.0	3.6	4.7	11	10	8.1	8.5	9.2
11	13	5.9	4.1	4.1	3.6	3.6	4.5	11	8.5	8.1	8.3	9.2
12	13	5.9	4.1	4.1	3.8	3.6	4.5	10	8.5	8.1	8.3	9.2
13	13	5.5	4.1	4.1	4.1	3.4	4.5	10	8.5	8.1	8.1	9.2
14	13	5.5	4.1	4.1	3.8	3.4	4.3	10	8.8	8.1	8.3	9.5
15	13	8.6	4.1	4.1	3.8	3.4	4.3	10	9.0	8.1	8.5	9.5
16	13	5.4	4.1	4.1	3.6	3.4	4.3	10	9.0	8.1	8.5	9.5
17	13	4.3	4.1	4.1	3.4	3.4	4.3	10	9.0	8.1	8.8	9.5
18	13	4.7	4.1	4.0	3.4	3.6	16	11	8.5	7.8	8.8	9.5
19	13	12	4.1	4.0	3.6	4.1	4.3	11	8.5	7.8	8.8	9.8
20	13	5.1	4.1	4.0	3.6	4.1	4.3	22	8.5	7.8	8.8	9.8
21	13	4.3	4.1	3.8	3.2	4.0	4.3	10	8.3	7.8	9.0	9.8
22	13	4.1	4.1	3.8	3.2	4.0	4.5	10	8.5	8.1	9.0	9.8
23	13	4.1	4.1	4.0	3.4	3.8	4.7	10	8.5	8.1	9.0	9.8
24	13	4.1	4.1	4.0	3.2	4.3	5.1	10	8.5	8.1	9.0	9.8
25	13	4.1	4.1	4.0	3.2	4.7	4.9	10	8.5	8.1	9.0	9.8
26	13	4.1	4.1	3.8	3.4	4.5	4.9	9.8	8.5	8.1	9.0	9.8
27	13	4.1	4.1	3.6	3.4	4.3	4.7	9.8	8.5	8.1	9.2	9.5
28	13	4.1	4.1	3.6	3.4	4.3	4.7	9.5	8.3	8.1	9.5	9.5
29	13	4.1	4.1	3.6	---	4.3	4.7	9.2	8.3	8.3	9.5	9.5
30	13	4.1	4.1	3.6	---	4.5	16	9.2	8.3	8.3	9.5	9.5
31	13	---	4.1	4.0	---	4.5	---	9.2	---	8.3	9.2	---
TOTAL	393	166.8	127.7	125.7	107.5	120.5	157.2	325.0	278.2	250.5	269.3	285.3
MEAN	12.7	5.56	4.12	4.05	3.84	3.89	5.24	10.5	9.27	8.08	8.69	9.51
MAX	13	12	4.5	4.7	5.3	4.7	16	22	17	8.3	9.5	9.8
MIN	12	4.1	4.1	3.6	3.2	3.4	4.3	7.2	8.3	7.8	8.1	9.2
AC-FT	780	331	253	249	213	239	312	645	552	497	534	566
MEAN a	189	68.7	18.5	28.8	78.2	143	189	302	234	95.0	275	290
AC-FT a	11,610	4,090	1,140	1,770	4,340	8,780	11,220	18,560	13,950	5,840	16,890	17,250
(b)	10,830	3,760	883	1,520	4,130	8,540	10,910	17,910	13,400	5,340	16,360	16,680

CAL YR 1974 TOTAL 11003.2 MEAN 30.1 MAX 1760 MIN 2.7 AC-FT 21820 MEAN a 219 AC-FT a 158,500
WTR YR 1975 TOTAL 2606.7 MEAN 7.14 MAX 22 MIN 3.2 AC-FT 5170 MEAN a 159 AC-FT a 115,400

a Adjusted for diversion to South Fork tunnel.
b Diversion, in acre-feet, from South Fork Feather River to South Fork diversion tunnel.

11395400 SLY CREEK RESERVOIR NEAR STRAWBERRY VALLEY, CALIF.

LOCATION.--Lat 39°35'01", long 121°06'45", in NW¼NW¼ sec.20, T.20 N., R.8 E., Butte County, Plumas National Forest, on right bank 100 ft (30 m) upstream from dam on Lost Creek, 1.4 mi (2.3 km) northwest of Strawberry Valley.

DRAINAGE AREA.--24.0 mi² (62.2 km²).

PERIOD OF RECORD.--November 1961 to current year (fragmentary prior to Mar. 14, 1962).

GAGE.--Nonrecording gage read once daily. Datum of gage is at mean sea level (levels by Oroville-Wyandotte Irrigation District). Prior to Sept. 30, 1966, water-stage recorder in valve chamber inside dam at same datum.

EXTREMES.--Current year: Maximum contents, 65,400 acre-ft (80.6 hm³) June 16 (elevation, 3,530.6 ft or 1,076.13 m); minimum, 1,000 acre-ft (1.23 hm³) Dec. 20, 21, Jan. 2 (elevation, 3,322.1 ft or 1,012.58 m).
Period of record: Maximum contents, 65,500 acre-ft (80.8 hm³) June 2-5, 11, 12, 1962, Apr. 7, 1963 (elevation, 3,531.5 ft or 1,076.40 m); minimum, 1,000 acre-ft (1.23 hm³) Dec. 20, 21, 1974, Jan. 2, 1975 (elevation, 3,322.1 ft or 1,012.58 m).

REMARKS.--Reservoir is formed by earthfill dam. Storage began in November 1961. Total capacity, 65,000 acre-ft (80.1 hm³) between elevations 3,285 ft (1,001.3 m), invert of outlet and 3,531 ft (1,076.2 m), top of spillway gate, all of which is available for release. Water is diverted into reservoir from South Fork Feather River through South Fork diversion tunnel and from North Yuba River basin through Slate Creek tunnel. Records, including extremes, show contents at time nonrecording gage was read. See schematic diagram of South Fork Feather River basin.

COOPERATION.--Reservoir nonrecording-gage readings furnished by Oroville-Wyandotte Irrigation District.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

3,320	860	3,420	16,600
3,340	2,150	3,450	26,300
3,360	4,300	3,480	38,500
3,380	7,360	3,510	53,400
3,400	11,500	3,532	66,200

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15500	9000	4300	1800	5400	17100	40400	42300	57500	64700	55700	44400
2	15200	8800	3900	1000	5400	17400	40300	42000	57400	64800	55200	44000
3	14900	9000	4200	1100	5600	17700	40400	42000	58000	64600	54700	43600
4	14600	8900	4600	1300	5700	18800	40600	42500	59400	64700	54200	43300
5	14400	8700	5200	1300	5900	19100	40700	42700	60500	64300	53700	42900
6	14100	8600	5100	1400	6000	19500	40200	42900	61300	64100	53200	42500
7	13900	8400	4800	2000	6900	20300	40300	42900	62100	64000	52800	42100
8	13900	8300	4500	2900	7300	20700	40100	42800	63600	63900	52400	42000
9	13800	8200	4300	3000	7800	21100	39400	42800	63900	63600	52000	41400
10	13800	8100	4000	3100	8200	26500	38900	42900	64200	63500	51600	41200
11	13600	7900	3600	3200	8600	27200	38800	43000	64600	63300	51300	40900
12	13300	7800	3300	3200	9300	27600	38400	43300	64600	63000	50900	40600
13	13200	7500	3100	3600	12300	27800	38200	43500	64600	62900	50700	40100
14	13000	9500	3000	3600	13900	28100	37800	45300	64800	63000	50300	39700
15	12900	9200	2800	3700	14600	28600	37600	46700	65300	63000	49800	39200
16	12900	8800	2300	3800	15100	28100	37300	48200	65400	62700	49500	39400
17	12600	8300	2000	3800	15700	27800	36900	49700	65100	62500	49100	39200
18	12200	8100	1700	3800	17900	27800	36700	51400	65000	62200	48800	39700
19	11900	7600	1400	4000	18300	27800	36300	53000	64500	61800	48600	39900
20	11700	7400	1000	4100	19400	29700	36000	54700	64100	61500	48300	39200
21	11500	7100	1000	4200	20000	30500	35700	55900	64200	61500	48300	38300
22	11300	7200	1200	4300	20100	31400	35400	57200	64300	60700	48000	37600
23	11000	6900	1300	4400	20100	32200	35800	57800	64400	60100	47600	36800
24	10800	6600	1400	4600	19200	32000	36200	57400	64500	59500	47300	35900
25	10500	6400	1500	4800	19000	34100	38300	57400	64500	59100	46900	35200
26	10300	6100	1700	4900	18400	35200	39600	57500	64500	58700	46500	34500
27	10100	5800	1700	5100	18300	36100	40600	57600	64500	58200	46100	34000
28	9800	5500	1800	5200	17600	38800	41400	57000	64500	57600	45700	33600
29	9600	5300	1800	5600	---	39000	41800	57400	64500	57200	45500	33200
30	9400	4700	2000	5500	---	39300	42000	57500	64500	56700	45100	32800
31	9200	---	2100	5400	---	39900	---	57500	---	56100	44700	---
MAX	15500	9500	5200	5600	20100	39900	42000	57800	65400	64800	55700	44400
MIN	9200	4700	1000	1000	5400	17100	35400	42000	57400	56100	44700	32800
(a)	3,389.7	3,363.2	3,339.0	3,367.8	3,423.3	3,483.1	3,487.6	3,517.2	3,529.1	3,514.7	3,493.1	3,466.7
(b)	-6,500	-4,500	-2,600	+3,300	+12,200	+22,300	+2,100	+15,500	+7,000	-8,400	-11,400	-11,900

CAL YR 1974 b -41,000
WTR YR 1975 b +17,100

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11395500 OROVILLE-WYANDOTTE CANAL NEAR CLIPPER MILLS, CALIF.

LOCATION.--Lat 39°33'15", long 121°11'31", in NW¼NE¼ sec.33, T.20 N., R.7 E., Butte County, in concrete valve house at head of canal, 2.5 mi (4.0 km) north of Clipper Mills.

PERIOD OF RECORD.--October 1927 to September 1941 (published as Forbestown ditch), October 1953 to current year. Monthly discharge only for October 1953 to September 1961, published with records for Lost Creek near Clipper Mills.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 3,166.0 ft (965.00 m) above mean sea level (levels by Oroville-Wyandotte Irrigation District). Prior to Sept. 30, 1941, nonrecording gages and Oct. 1, 1941, to Nov. 16, 1962, water-stage recorder at sites at different datums 4 mi (6 km) upstream in abandoned portion of canal, 0.3 mi (0.5 km) downstream from Lost Creek Dam.

AVERAGE DISCHARGE (prior to closure of lumber mill).--23 years (1927-41, 1953-62), 21.0 ft³/s (0.595 m³/s), 15,200 acre-ft/yr (18.7 hm³/yr); 13 years (1962-75), 8.00 ft³/s (0.227 m³/s), 5,800 acre-ft/yr (7.15 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 43 ft³/s (1.22 m³/s) Aug. 9 to Sept. 9, 1937; no flow at times in many years.

REMARKS.--Records good. Water is discharged to canal through valve in Woodleaf penstock. Prior to Nov. 16, 1962, canal diverted from Lost Creek Dam. Water is used for irrigation and domestic supply. Demand for water reduced when a large lumber mill closed at Woodleaf in 1962. See schematic diagram of South Fork Feather River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	3.7	5.2	2.8	1.6				2.0	7.6	17	18
2	18	4.0	5.6	2.8	1.7				2.4	7.7	17	18
3	18	4.3	5.6	2.8	1.1				1.8	7.6	17	18
4	18	4.4	5.6	2.8	.86				2.0	7.6	17	18
5	16	4.3	2.9	2.8	.10				2.2	7.6	17	18
6	15	4.0	.05	2.8	.10				2.6	7.6	17	18
7	15	4.2	0	1.9	.10				2.6	7.4	17	18
8	15	4.2	0	.15	.10				2.7	7.8	17	18
9	15	4.2	0	.35	.10				4.0	7.8	17	18
10	15	4.2	0	.28	.10				5.7	7.7	17	18
11	15	4.3	0	.10	.10				5.9	7.7	17	18
12	15	4.4	0	.05	.10				5.5	7.6	17	18
13	15	4.3	0	.05	.05				6.6	7.7	17	18
14	15	4.3	0	.05	.05				7.2	9.8	17	18
15	16	4.3	0	.05	.05				7.4	10	17	18
16	17	4.2	1.6	.05	0				7.4	13	17	18
17	17	4.3	2.8	.05	0				8.1	14	17	18
18	17	4.4	2.6	.05	0				8.4	14	17	18
19	17	4.2	2.7	.05	0				8.4	13	17	18
20	17	4.2	3.0	.05	0				8.4	13	17	18
21	17	4.3	3.0	.05	0				8.4	13	18	18
22	15	4.4	3.0	.05	0				8.4	13	18	18
23	13	4.2	3.0	.05	0				8.4	13	17	18
24	13	4.2	2.8	.05	0				8.4	13	17	18
25	9.2	4.4	2.8	.05	0				8.3	14	17	18
26	7.0	4.4	2.8	.05	0				7.8	15	17	18
27	7.0	4.4	2.8	.05	0				7.6	15	18	18
28	6.5	4.2	2.8	.05	0				7.6	15	18	18
29	5.6	4.6	2.8	.05	---				7.6	15	18	18
30	4.0	4.9	2.8	.05	---				7.4	16	18	18
31	3.4	---	2.8	.11	---		---		---	17	18	---
TOTAL	423.7	128.4	69.05	20.64	6.21	0	0	0	181.2	345.2	534	540
MEAN	13.7	4.28	2.23	.67	.22	0	0	0	6.04	11.1	17.2	18.0
MAX	18	4.9	5.6	2.8	1.7	0	0	0	8.4	17	18	18
MIN	3.4	3.7	0	.05	0	0	0	0	1.8	7.4	17	18
AC-FT	840	255	137	41	12	0	0	0	359	685	1060	1070

CAL YR 1974 TOTAL 2261.21 MEAN 6.20 MAX 18 MIN 0 AC-FT 4490
WTR YR 1975 TOTAL 2248.40 MEAN 6.16 MAX 18 MIN 0 AC-FT 4460

11396000 LOST CREEK NEAR CLIPPER MILLS, CALIF.

LOCATION.--Lat 39°34'25", long 121°08'26", in SE¼SW¼ sec.24, T.20 N., R.7 E., Butte County, Plumas National Forest, on left bank 0.3 mi (0.5 km) downstream from Lost Creek Reservoir, and 2.8 mi (4.5 km) north of Clipper Mills.

DRAINAGE AREA.--30.0 mi² (77.7 km²).

PERIOD OF RECORD.--October 1927 to September 1941, October 1948 to current year. Records for Woodleaf powerplant from February 1963 to September 1966 in files of Geological Survey.

GAGE.--Water-stage recorder. Altitude of gage is 3,170 ft (966 m), from topographic map.

AVERAGE DISCHARGE.--27 years (1927-41, 1948-61, prior to regulation of Sly Creek Reservoir), 73.0 ft³/s (2.07 m³/s), 52,850 acre-ft/yr (65.2 hm³/yr); 14 years (1961-75), 24.6 ft³/s (0.697 m³/s), 17,820 acre-ft/yr (22.0 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 376 ft³/s (10.6 m³/s) Apr. 5 (gage height, 2.89 ft or 0.881 m); no flow on several days.
Period of record: Maximum discharge, 5,000 ft³/s (142 m³/s) Dec. 22, 1955 (gage height, 6.90 ft or 2.103 m); no flow at times in some years.

REMARKS.--Records fair. Flow regulated by Sly Creek Reservoir 1.5 mi (2.4 km) upstream (see sta 11395400) and Lost Creek Reservoir 0.3 mi (0.5 km) upstream, usable capacity, 5,920 acre-ft (7.30 hm³) with flashboards. Water is diverted into Sly Creek Reservoir through South Fork diversion tunnel from South Fork Feather River and through Slate Creek tunnel from North Yuba River basin. Woodleaf tunnel diverts from Lost Creek Reservoir to Woodleaf powerhouse. Oroville-Wyandotte Canal (see sta 11395500) diverts from Woodleaf penstock for irrigation and domestic use. Records represent seepage, release, or spill from Lost Creek Dam to Lost Creek. See schematic diagram of South Fork Feather River basin.

REVISIONS (WATER YEARS).--WSP 1395: 1954. WSP 1931: Drainage area. WRD Calif. 1968: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	.02	.02	.07	.77	.70	.70	.49	.49	.24	.12	.12
2	.70	0	.02	.06	.90	.82	.70	.43	.46	.24	.12	.12
3	.74	0	.57	.05	.52	.74	.70	.46	1.4	.24	.12	.12
4	.66	0	.26	.08	.58	.70	.70	.43	.46	.24	.12	.12
5	1.2	0	.11	.09	.49	.70	136	.40	.43	.24	.12	.12
6	.66	0	.08	.51	.49	.78	6.8	.40	.43	.26	.12	.12
7	.66	.07	.06	.50	.70	.94	.74	.37	.37	.26	.12	.12
8	.70	.05	.05	.73	.86	1.6	.74	.34	.10	.24	.12	.12
9	.70	.01	.05	.31	1.8	1.0	.78	.31	.11	.24	.12	.12
10	.74	.01	.05	.22	.94	.94	.78	.31	.43	.24	.12	.14
11	.70	.01	.05	.18	.82	.82	.78	.28	.40	.24	.12	.14
12	.66	.01	.10	.14	1.5	.82	.78	.28	.37	.24	.12	.12
13	.62	.01	.08	.12	3.6	.78	.74	.28	.34	.24	.12	.12
14	.62	.01	.06	.12	1.2	.70	.74	.28	.31	.22	.12	.12
15	.58	.01	.05	.12	.90	.70	.74	7.5	.28	.26	.12	.12
16	.58	.01	.05	.11	.82	.70	.70	9.5	.28	.24	.14	.12
17	.58	.01	.05	.10	.74	.70	.70	7.0	.28	.22	.14	.01
18	.62	.09	.05	.10	.70	.78	.70	4.0	.28	.20	.20	0
19	.58	.03	.05	.10	1.0	.94	.66	3.0	.31	.20	.18	0
20	.58	.02	.05	.10	.94	.86	.62	1.3	.31	.20	.18	0
21	.55	.22	.14	.10	1.3	.82	.58	.94	.34	.20	.14	0
22	.55	.06	.06	.10	1.2	.82	.58	.86	.34	.22	.14	0
23	.55	.02	.05	.10	.74	.78	.62	.82	.31	.22	.12	0
24	.42	.02	.05	.10	.70	1.2	.74	.74	.34	.20	.12	0
25	.01	.07	.05	.10	.70	2.3	.74	.66	.31	.20	.12	.24
26	0	.03	.05	.16	.66	1.1	.66	.62	.28	.20	.12	.52
27	.03	.02	.18	.11	.66	.94	.62	53	.26	.16	.12	.52
28	.16	.02	.21	.11	.70	.82	.55	136	.24	.14	.12	.49
29	0	.02	.10	.11	---	.82	.52	.58	.24	.14	.12	.43
30	0	.02	.08	.10	---	.74	.52	.52	.24	.14	.12	.43
31	.10	---	.07	.11	---	.70	---	.52	---	.12	.12	---
TOTAL	15.95	.87	2.90	5.01	26.93	27.76	161.93	232.62	10.74	6.64	4.00	4.60
MEAN	.51	.029	.094	.16	.96	.90	5.40	7.50	.36	.21	.13	.15
MAX	1.2	.22	.57	.73	3.6	2.3	136	136	1.4	.26	.20	.52
MIN	0	0	.02	.05	.49	.70	.52	.28	.10	.12	.12	0
AC-FT	32	1.7	5.8	9.9	53	55	321	461	21	13	7.9	9.1
(a)	19,360	13,670	9,800	2,340	12,560	25,250	32,450	33,860	27,550	19,550	31,680	31,160

CAL YR 1974 TOTAL 15019.09 MEAN 41.1 MAX 2180 MIN 0 AC-FT 29790
WTR YR 1975 TOTAL 499.95 MEAN 1.37 MAX 136 MIN 0 AC-FT 992

a Diversion, in acre-feet, to Woodleaf powerplant, furnished by Oroville-Wyandotte Irrigation District.

11396200 SOUTH FORK FEATHER RIVER BELOW FORBESTOWN DAM, CALIF.

LOCATION.--Lat 39°33'05", long 121°12'30", in SE¼NE¼ sec.32, T.20 N., R.7 E., Butte County, Plumas National Forest, on right bank 500 ft (152 m) downstream from Forbestown Dam, 0.4 mi (0.6 km) upstream from Oroleve Creek, and 4.0 mi (6.4 km) northeast of Forbestown.

DRAINAGE AREA.--87.5 mi² (226.6 km²).

PERIOD OF RECORD.--July 1962 to current year. Records for Forbestown powerplant from February 1963 to September 1966 in files of Geological Survey.

GAGE.--Water-stage recorder. Altitude of gage is 1,690 ft (515 m), from topographic map.

AVERAGE DISCHARGE.--13 years, 64.6 ft³/s (1.829 m³/s), 46,800 acre-ft/yr (57.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 715 ft³/s (20.2 m³/s) Mar. 25 (gage height, 7.05 ft or 2.149 m); minimum daily, 4.1 ft³/s (0.12 m³/s) Nov. 9-11, June 1.
Period of record: Maximum discharge, 7,510 ft³/s (213 m³/s) Jan. 31, 1963 (gage height, 13.85 ft or 4.221 m in gage well, 15.3 ft or 4.66 m, from floodmarks); minimum daily, 0.6 ft³/s (0.017 m³/s) Apr. 4, 1963.

REMARKS.--Records fair. Flow regulated by Little Grass Valley Reservoir (see sta 11395020), Sly Creek Reservoir (see sta 11395400), and smaller reservoirs. Water from North Yuba River basin is imported through Slate Creek tunnel (see sta 11413250) to Sly Creek Reservoir. Oroville-Wyandotte Canal (see sta 11395500) diverts above station. Tunnel 600 ft (183 m) above station diverts most flow through Forbestown powerplant except fish-water releases and uncontrolled spill over Forbestown Dam. See schematic diagram of South Fork Feather River basin.

REVISIONS.--WRD Calif. 1968: 1967 diversions.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	4.6	5.2	5.9	5.2	56	41	4.1	9.9	10	11
2	11	11	4.6	5.2	36	5.2	45	41	7.9	10	10	11
3	11	11	4.7	5.2	5.8	5.2	44	60	10	9.9	11	11
4	11	11	4.6	5.2	6.1	5.2	42	58	10	10	11	11
5	11	7.4	4.6	5.2	5.9	5.2	97	47	10	10	11	11
6	11	4.3	4.6	5.4	5.8	5.2	30	21	10	9.9	11	11
7	11	4.3	4.6	5.4	5.8	5.4	22	29	10	10	11	11
8	11	4.3	4.6	5.4	5.9	22	19	33	10	10	11	11
9	11	4.1	4.6	5.4	6.1	5.2	15	36	10	9.9	11	10
10	11	4.1	4.7	5.4	6.1	5.2	21	34	10	10	11	10
11	11	4.1	4.7	5.4	5.9	5.2	27	36	10	10	11	10
12	11	4.6	4.7	5.4	82	6.1	30	38	10	10	11	10
13	11	4.4	4.9	5.4	348	5.2	31	39	10	10	11	10
14	11	4.4	4.9	5.4	5.6	5.2	35	46	10	10	11	10
15	11	4.4	5.1	5.4	5.2	5.2	27	60	10	10	11	10
16	11	4.4	5.1	5.4	5.2	5.2	12	62	10	10	11	10
17	11	4.4	5.1	5.4	5.2	5.2	15	56	10	10	11	10
18	11	4.6	5.1	5.6	5.2	5.4	25	52	10	10	11	10
19	11	4.6	5.1	5.6	9.7	9.2	12	49	10	10	11	10
20	11	4.6	5.1	5.6	6.0	5.4	5.6	53	10	10	11	10
21	11	4.7	5.1	5.6	5.4	5.6	17	35	9.9	10	11	10
22	11	4.7	5.1	5.6	5.4	5.4	18	29	9.9	10	11	10
23	11	4.7	5.2	5.6	5.4	5.4	21	23	9.9	10	11	10
24	11	4.7	5.2	5.6	5.4	86	79	22	10	10	11	10
25	11	4.7	5.2	5.6	5.4	493	90	21	10	10	11	10
26	11	4.7	5.2	5.6	5.2	185	63	18	10	10	11	10
27	11	4.7	5.2	5.6	5.2	116	52	31	10	10	11	9.9
28	11	4.6	5.2	5.6	5.2	99	47	102	10	10	11	9.9
29	11	4.6	5.2	5.6	---	92	44	6.1	10	10	11	9.9
30	11	4.6	5.2	5.6	---	78	56	6.6	9.9	10	11	9.9
31	11	---	5.2	5.6	---	68	---	4.5	---	10	11	---
TOTAL	341	163.7	153.0	169.2	610.0	1359.7	1097.6	1187.2	291.6	309.6	339	307.6
MEAN	11.0	5.46	4.94	5.46	21.8	43.9	36.6	38.3	9.72	9.99	10.9	10.3
MAX	11	11	5.2	5.6	348	493	97	102	10	10	11	11
MIN	11	4.1	4.6	5.2	5.2	5.2	5.6	4.5	4.1	9.9	10	9.9
AC-FT	676	325	303	336	1210	2700	2180	2350	578	614	672	610
(a)	18,760	11,850	8,050	2,700	17,510	35,250	37,300	36,870	28,940	19,330	32,350	31,750

CAL YR 1974 TOTAL 36304.8 MEAN 99.5 MAX 4250 MIN 4.1 AC-FT 72010
WTR YR 1975 TOTAL 6329.2 MEAN 17.3 MAX 493 MIN 4.1 AC-FT 12550

a Diversion, in acre-feet, to Forbestown powerplant, furnished by Oroville-Wyandotte Irrigation District.

11396310 MINERS RANCH CANAL BELOW PONDEROSA DAM, NEAR FORBESTOWN, CALIF.

LOCATION.--Lat 39°33'00", long 121°18'20", in SE¼NW¼ sec.33, T.20 N., R.6 E., Butte County, on right bank 800 ft (244 m) downstream from Ponderosa Dam, and 3 mi (5 km) northwest of Forbestown.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 975 ft (297 m), from topographic map.

AVERAGE DISCHARGE.--13 years, 223 ft³/s (6.315 m³/s), 161,600 acre-ft/yr (199 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 279 ft³/s (7.90 m³/s) Oct. 12, 1971; no flow at times in most years.

REMARKS.--Records good. Canal diverts from South Fork Feather River at Ponderosa Dam. Water is used for power development and irrigation. See schematic diagram of South Fork Feather River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	250	252	225	108	99	248	242	242	252	270	264	263
2	249	248	50	108	139	252	243	242	252	270	256	263
3	250	223	61	108	203	255	243	240	251	270	261	263
4	250	236	187	109	203	256	243	240	250	261	267	263
5	251	239	234	109	202	256	242	240	250	267	266	262
6	251	240	234	109	201	256	242	240	250	267	266	261
7	252	244	234	110	200	245	242	240	250	266	267	261
8	252	243	234	175	200	225	242	240	250	267	268	261
9	252	245	231	210	202	232	242	240	249	268	267	262
10	251	243	229	146	202	239	242	237	250	269	267	261
11	251	244	231	116	210	240	242	229	250	270	267	261
12	251	242	230	100	228	240	242	229	250	270	266	261
13	251	237	226	100	229	240	242	229	251	270	266	261
14	251	237	225	101	228	240	242	230	250	269	266	261
15	250	237	222	101	228	240	242	230	249	269	266	261
16	250	237	230	101	228	240	242	230	249	268	263	261
17	251	238	231	101	233	239	242	230	245	268	261	261
18	250	233	232	101	242	239	242	230	245	268	261	262
19	251	236	231	101	244	239	242	229	264	269	261	262
20	251	239	176	101	244	241	242	229	263	269	260	262
21	256	250	103	101	244	244	242	229	262	269	257	262
22	257	243	103	100	244	244	242	229	261	268	258	262
23	256	239	103	100	244	244	242	228	245	268	258	262
24	256	246	102	100	244	244	242	226	249	267	258	262
25	256	239	102	100	245	218	240	226	261	267	260	262
26	256	236	102	100	245	216	240	229	263	268	260	261
27	256	231	102	100	245	240	240	229	264	268	264	261
28	255	238	236	100	246	242	241	229	267	268	266	261
29	255	238	101	100	---	242	242	232	269	268	264	261
30	255	239	109	99	---	242	242	244	269	268	263	261
31	254	---	108	99	---	242	---	252	---	269	263	---
TOTAL	7825	7192	5502	3616	6130	7480	7256	7253	7630	8313	8157	7848
MEAN	252	240	177	116	219	241	242	234	254	268	263	262
MAX	257	252	236	210	246	256	243	252	269	270	268	263
MIN	249	223	50	99	99	216	240	226	245	261	256	261
AC-FT	15520	14270	10910	6770	12160	14840	14390	14390	15130	16490	16180	15570
(a)	13,.10	13,110	9,670	5,340	11,320	14,240	13,810	12,910	12,680	13,520	13,200	12,630

CAL YR 1974 TOTAL 83069 MEAN 228 MAX 275 MIN 50 AC-FT 164800
WTR YR 1975 TOTAL 84000 MEAN 230 MAX 270 MIN 50 AC-FT 166600

a Diversion, in acre-feet, to Kelly Ridge powerplant, furnished by Oroville-Wyandotte Irrigation District.

11396330 BANGOR CANAL BELOW MINERS RANCH RESERVOIR, NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°30'15", long 121°27'16", in NE¼SW¼ sec.18, T.19 N., R.5 E., Butte County, on left bank 400 ft (122 m) downstream from outlet at Miners Ranch Dam, and 5 mi (8 km) east of Oroville.

PERIOD OF RECORD.--January 1963 to current year.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 815 ft (248 m), from topographic map.

AVERAGE DISCHARGE.--12 years, 15.5 ft³/s (0.439 m³/s), 11,230 acre-ft/yr (13.8 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 65 ft³/s (1.84 m³/s) Aug. 17-20, 1963; no flow for several days in 1965, 1969.

REMARKS.--Records excellent. Flow regulated by Miners Ranch Reservoir, capacity, 912 acre-ft (1.12 hm³). Canal completed in November 1962. Water is used for irrigation. See schematic diagram of South Fork Feather River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	14	12	8.4	6.2	7.2	4.7	5.7	26	28	27	27
2	27	14	12	8.4	6.2	7.2	4.7	5.7	26	28	27	27
3	26	14	12	8.7	6.2	7.5	5.2	5.7	26	28	27	27
4	26	14	12	8.7	6.2	7.5	5.9	5.7	26	28	27	27
5	26	14	12	8.7	6.2	7.8	5.9	8.4	26	28	27	27
6	26	14	12	8.7	6.2	7.8	5.9	8.4	26	28	27	27
7	26	14	12	6.7	6.4	7.9	5.9	8.4	26	28	27	27
8	26	14	12	4.9	6.4	7.8	5.9	8.4	26	28	27	27
9	26	14	12	4.9	6.6	7.8	5.9	8.1	26	27	27	27
10	26	14	12	4.9	7.5	7.8	5.9	8.1	27	27	27	27
11	26	14	12	4.9	7.5	7.5	5.7	8.1	27	27	28	27
12	26	14	12	4.9	7.5	7.0	5.7	8.1	27	27	28	27
13	25	14	12	4.9	7.5	7.0	5.7	8.1	27	27	27	27
14	25	13	12	4.9	7.5	7.0	5.7	12	27	27	27	27
15	25	12	12	4.6	7.5	7.0	5.7	16	27	27	27	27
16	25	12	12	4.6	7.5	7.0	5.7	16	27	27	27	27
17	25	12	12	4.6	7.5	7.0	5.7	16	27	27	27	27
18	24	12	12	4.6	7.5	7.0	5.7	23	27	27	27	27
19	24	12	12	4.6	7.5	7.2	5.7	23	27	27	27	27
20	24	12	12	4.6	7.5	7.2	5.8	24	27	27	27	27
21	24	12	11	4.6	7.5	7.3	5.8	24	27	27	27	27
22	23	12	11	4.9	7.5	7.3	5.9	24	27	27	27	27
23	23	12	11	4.9	7.5	7.2	5.9	24	27	27	27	27
24	23	12	11	6.4	7.5	7.4	5.9	24	27	27	27	27
25	21	12	11	7.2	7.2	6.1	5.9	25	28	27	27	27
26	20	12	9.8	7.2	7.2	4.7	5.9	26	28	27	27	27
27	20	12	8.7	7.2	7.2	4.7	5.9	26	28	27	27	27
28	20	12	8.7	6.9	7.2	4.7	5.9	26	28	27	27	26
29	19	12	8.7	6.4	---	4.7	5.9	26	28	27	27	27
30	19	12	8.7	6.4	---	4.7	5.9	26	28	27	27	27
31	16	---	8.4	6.4	---	4.7	---	26	---	27	27	---
TOTAL	739	387	348.0	188.7	197.9	210.7	171.9	503.9	807	845	839	809
MEAN	23.8	12.9	11.2	6.09	7.07	6.80	5.73	16.3	26.9	27.3	27.1	27.0
MAX	27	14	12	8.7	7.5	7.9	5.9	26	28	28	28	27
MIN	16	12	8.4	4.6	6.2	4.7	4.7	5.7	26	27	27	26
AC-FT	1470	768	690	374	393	418	341	999	1600	1680	1660	1600

CAL YR 1974 TOTAL 5949.7 MEAN 16.3 MAX 29 MIN 4.6 AC-FT 11800
WTR YR 1975 TOTAL 6047.1 MEAN 16.6 MAX 28 MIN 4.6 AC-FT 11990

11396350 SOUTH FORK FEATHER RIVER AT PONDEROSA DAM, CALIF.

LOCATION.--Lat 39°32'52", long 121°18'11", in NW¼SE¼ sec.33, T.20 N., R.6 E., Butte County, at entrance to Miners Ranch Canal on the left end of Ponderosa Dam, 2,800 ft (853 m) upstream from Sucker Run, and 2.6 mi (4.2 km) northwest of Forbestown.

DRAINAGE AREA.--108 mi² (280 km²).

PERIOD OF RECORD.--July 1962 to current year.

GAGE.--Water-stage recorder, high level sluice gate, and concrete spillway of Ponderosa Dam. Datum of gage is at mean sea level (levels by Oroville-Wyandotte Irrigation District). Prior to Oct. 1, 1967, at site 1,800 ft (550 m) downstream at different datum.

AVERAGE DISCHARGE (adjusted for diversion to Miners Ranch Canal).--13 years, 494 ft³/s (13.99 m³/s), 357,900 acre-ft/yr (441 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,160 ft³/s (146 m³/s) July 22; no flow many days.
Period of record: Maximum discharge, 11,000 ft³/s (312 m³/s) Dec. 22, 1964 (gage height, 11.52 ft or 3.511 m in gage well, 12.7 ft or 3.87 m, outside from floodmarks, site and datum then in use); no flow for several months most years.

REMARKS.--Records good. Records are combined flow through sluice gate and flow over spillway. Flow regulated by several reservoirs and diversions. Water is imported from North Yuba River basin through Slate Creek tunnel. Miners Ranch Canal (see sta 11396310) diverts at Ponderosa Dam for power development and irrigation; diversion began in October 1962. See schematic diagram of South Fork Feather River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	61	0		0	120	560	484	345	0	214	250
2	45	0	0		130	1.0	544	472	340	0	250	255
3	97	0	11		14	221	530	484	340	0	255	260
4	52	0	34		61	400	530	502	335	0	265	265
5	68	0	0		.20	310	606	484	330	0	218	265
6	47	0	0		0	410	532	309	325	0	265	260
7	84	0	0		0	410	526	405	325	0	241	255
8	70	0	0		0	650	514	438	320	0	290	255
9	67	0	0		397	380	508	438	315	0	290	260
10	79	0	0		361	356	496	432	315	0	265	144
11	60	0	0		33	490	508	449	310	0	241	265
12	66	0	0		290	472	508	449	310	0	111	285
13	64	0	0		1730	466	508	444	315	0	250	290
14	70	0	0		562	454	502	449	315	0	255	290
15	65	0	0		160	460	490	454	315	0	245	290
16	64	0	0		60	472	472	466	315	0	245	295
17	56	0	0		20	454	460	466	315	0	245	300
18	0	0	0		64	496	472	460	315	0	255	300
19	8.0	0	0		320	606	460	454	300	0	260	300
20	17	0	0		305	580	455	454	183	0	123	300
21	0	0	0		449	562	449	444	0	0	236	300
22	68	0	0		427	586	449	422	0	508	260	300
23	60	0	0		444	532	449	400	0	295	260	300
24	84	0	0		427	621	526	400	0	250	260	295
25	90	0	0		416	1660	606	394	0	246	265	295
26	75	0	0		410	1010	532	400	0	250	265	295
27	68	0	0		229	765	490	400	0	223	255	295
28	108	0	0		400	671	490	472	0	250	260	295
29	96	0	0		---	638	484	380	0	250	260	280
30	67	0	0		---	619	490	372	0	250	260	265
31	106	---	0		---	580	---	350	---	250	255	---
TOTAL	1959.0	61	45	0	7769.20	16448.8	15170	13435	6283	2772	7619	8306
MEAN	63.2	2.03	1.45	0	275	531	506	433	209	89.4	246	277
MAX	108	61	34	0	1730	1660	606	502	345	508	290	300
MIN	0	0	0	0	0	1.0	449	309	0	0	111	144
AC-FT	3890	121	89	0	15290	32630	30090	26650	12460	5500	15110	16470
MEAN a	316	242	179	110	494	772	748	667	464	358	509	538
AC-FT a	19,410	14,390	11,000	6,770	27,450	47,470	44,480	41,040	27,590	21,990	31,290	32,040

CAL YR 1974 TOTAL 143945.60 MEAN 394 MAX 6180 MIN 0 AC-FT 285500 MEAN a 622 AC-FT a 450,300
WTR YR 1975 TOTAL 79806.00 MEAN 219 MAX 1730 MIN 0 AC-FT 158300 MEAN a 449 AC-FT a 324,900

a Adjusted for diversion to Miners Ranch Canal.

11396400 SUCKER RUN NEAR FORBESTOWN, CALIF.

LOCATION.--Lat 39°33'12", long 121°18'04", in NW¼NE¼ sec.33, T.20 N., R.6 E., Butte County, on left bank at upstream side of road bridge, 0.7 mi (1.1 km) upstream from confluence with South Fork Feather River, and 2.8 mi (4.5 km) northwest of Forbestown.

DRAINAGE AREA.--18.7 mi² (48.4 km²).

PERIOD OF RECORD.--June 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 960 ft (292 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 28.3 ft³/s (0.801 m³/s), 20,500 acre-ft/yr (25.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 880 ft³/s (24.9 m³/s) Feb. 13 (gage height, 5.18 ft or 1.579 m); minimum daily, 4.6 ft³/s (0.13 m³/s) Sept. 24-30.

Period of record: Maximum discharge, 1,320 ft³/s (37.4 m³/s) Jan. 21, 1967 (gage height, 6.03 ft or 1.838 m), from rating curve extended as explained below; minimum daily, 0.40 ft³/s (0.011 m³/s) Oct. 7, 1966.

Flood of Dec. 22, 1964, reached a stage of 7.4 ft (2.26 m), from floodmarks, discharge, 2,190 ft³/s (62 m³/s) from rating curve extended above 600 ft³/s (17.0 m³/s) on basis of computation of maximum flow over rock control.

REMARKS.--Records good. See schematic diagram of South Fork Feather River basin.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1966-68(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	11	11	12	46	39	59	41	21	12	6.3	6.1
2	6.8	10	11	12	133	49	55	39	20	12	7.0	6.1
3	7.0	9.7	26	11	51	41	57	46	19	12	7.1	5.8
4	7.1	9.7	25	13	85	36	61	44	19	12	7.0	5.6
5	6.7	9.7	15	12	41	37	60	39	18	12	6.6	5.5
6	6.7	9.7	13	40	36	42	55	37	17	12	6.3	5.4
7	6.7	13	12	36	47	111	54	36	18	11	6.2	5.3
8	7.2	13	12	56	82	155	54	35	18	11	6.2	5.2
9	7.6	11	11	23	164	92	54	34	16	11	6.1	5.4
10	7.7	11	11	19	110	73	53	33	16	10	6.1	6.1
11	7.2	10	11	17	58	60	53	32	16	10	5.9	6.3
12	6.9	10	12	16	256	52	53	31	16	11	5.8	6.0
13	6.7	10	13	15	461	50	51	30	15	10	6.0	5.8
14	6.9	10	12	14	143	51	52	29	15	10	6.1	5.7
15	7.0	10	11	14	85	51	49	28	15	9.1	6.2	5.3
16	6.9	10	11	14	62	57	46	28	15	10	6.1	5.0
17	7.0	10	11	13	50	53	44	27	15	9.7	6.0	5.0
18	6.8	14	11	13	44	77	42	26	15	9.4	8.2	4.9
19	6.7	11	11	13	79	164	41	26	15	9.0	9.3	5.0
20	6.8	11	11	12	71	110	40	25	15	8.9	8.8	5.0
21	6.6	19	11	12	51	105	39	25	14	8.7	8.2	4.9
22	6.5	15	11	12	43	104	38	25	14	8.3	8.2	4.9
23	6.7	12	11	11	40	89	40	24	13	7.9	7.5	4.7
24	7.1	12	11	11	38	159	89	24	16	7.7	7.0	4.6
25	7.4	14	11	11	37	372	77	23	16	7.4	6.7	4.6
26	7.4	12	11	13	35	154	58	23	15	6.9	6.4	4.6
27	7.7	11	18	12	36	113	51	22	14	6.5	6.4	4.6
28	14	11	22	12	36	91	47	21	14	6.3	6.4	4.6
29	9.1	11	15	12	---	79	44	21	13	6.3	6.4	4.6
30	8.6	11	13	12	---	72	43	21	13	6.4	6.4	4.6
31	14	---	12	13	---	66	---	20	---	6.4	6.3	---
TOTAL	234.3	341.8	407	506	2420	2804	1559	915	476	290.9	209.2	157.2
MEAN	7.56	11.4	13.1	16.3	86.4	90.5	52.0	29.5	15.9	9.38	6.75	5.24
MAX	14	19	26	56	461	372	89	46	21	12	9.3	6.3
MIN	6.5	9.7	11	11	35	36	38	20	13	6.3	5.8	4.6
AC-FT	465	678	807	1000	4800	5560	3090	1810	944	577	415	312

CAL YR 1974 TOTAL 15949.1 MEAN 43.7 MAX 581 MIN 5.8 AC-FT 31640
WTR YR 1975 TOTAL 10320.4 MEAN 28.3 MAX 461 MIN 4.6 AC-FT 20470

Peak discharge (base, 300 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-13	0400	5.18	880	3-25	0130	4.50	600
3-19	1400	3.71	333				

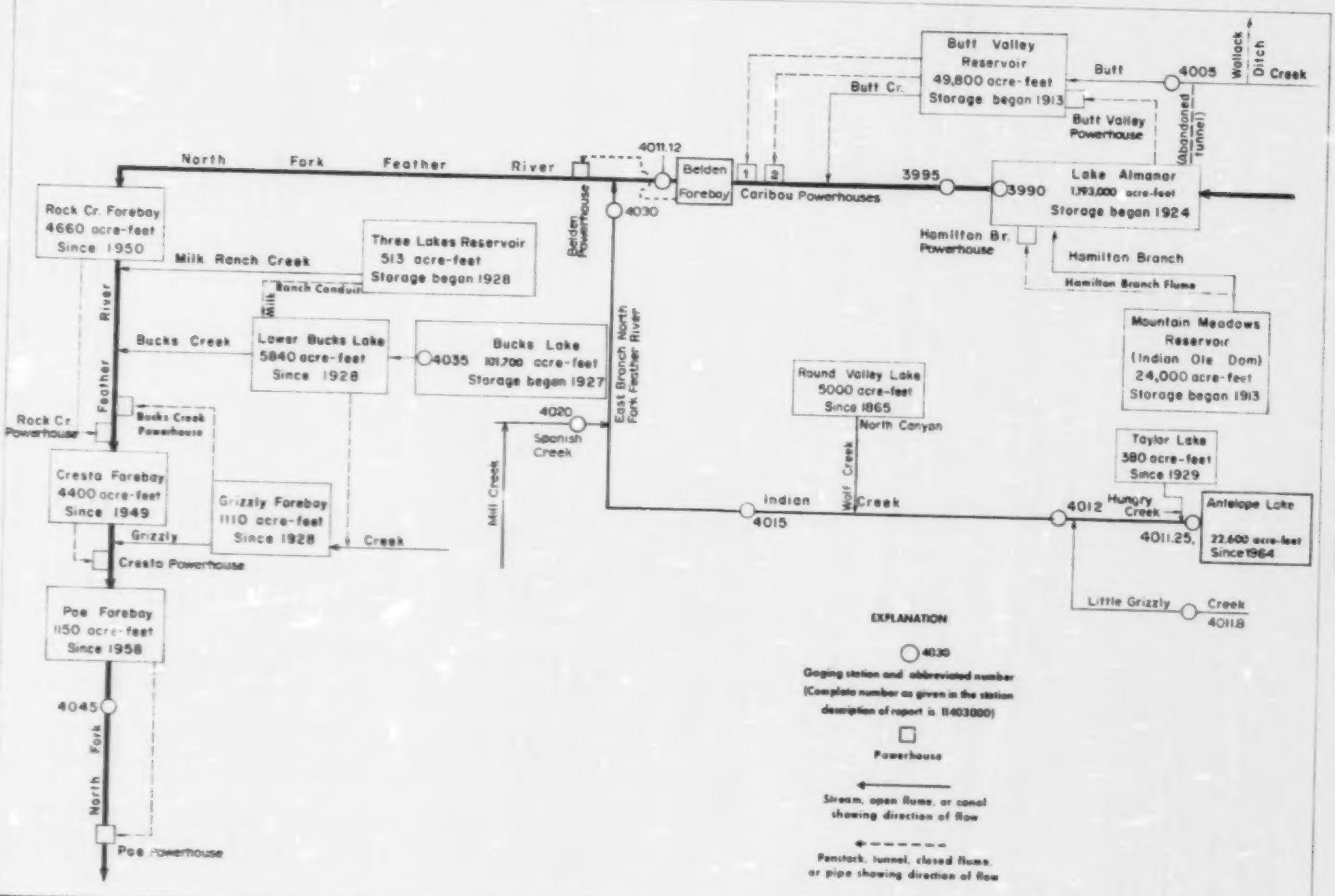

North Fork Feather River
Butt Valley Reservoir 49,800 acre-feet Storage began 1913
Butt Creek
4005
Wallack Ditch
Butt Valley Powerhouse
(Abandoned tunnel)
Butt Cr.
4011.12
Belden Forebay
1
2
Caribou Powerhouses
3995
3990
Lake Almanor 1,193,000 acre-feet Storage began 1924
Hamilton Br. Powerhouse
Hamilton Branch
Hamilton Branch Flume
Mountain Meadows Reservoir (Indian Ole Dam) 24,000 acre-feet Storage began 1913
Rock Cr. Forebay 4660 acre-feet Since 1950
Belden Powerhouse
4030
Three Lakes Reservoir 513 acre-feet Storage began 1928
Milk Ranch Creek
Milk Ranch Conduit
Bucks Creek
Lower Bucks Lake 5840 acre-feet Since 1928
4035
Bucks Lake 101,700 acre-feet Storage began 1927
East Branch North Fork Feather River
Round Valley Lake 5000 acre-feet Since 1865
North Canyon
Wolf Creek
Taylor Lake 380 acre-feet Since 1929
Rock Cr. Powerhouse
Bucks Creek Powerhouse
4020
Spanish Creek
Mill Creek
Cresta Forebay 4400 acre-feet Since 1949
Grizzly Forebay 1110 acre-feet Since 1928
Grizzly Creek
Cresta Powerhouse
Indian Creek
4015
4012
Hungry Creek
4011.25
Antelope Lake 22,600 acre-feet Since 1964
Little Grizzly Creek
4011.8
Poe Forebay 1150 acre-feet Since 1958
4045
North Fork
Poe Powerhouse
EXPLANATION
4030
Gaging station and abbreviated number (Complete number as given in the station description of report is 11403000)
Powerhouse
Stream, open flume, or canal showing direction of flow
Penstock, tunnel, closed flume, or pipe showing direction of flow

FIGURE 6.--Schematic diagram showing diversions and storage in North Fork Feather River basin

11399000 LAKE ALMANOR AT PRATTVILLE, CALIF.

LOCATION.--Lat 40°12'50", long 121°09'40", in SW¼NE¼ sec.11, T.27 N., R.7 E., Plumas County, Plumas National Forest, at outlet tower to No. 2 tunnel on North Fork Feather River at Prattville, 4.7 mi (7.6 km) northwest of Lake Almanor Dam, and 5.6 mi (9.0 km) northwest of Canyondam.

DRAINAGE AREA.--491 mi² (1,272 km²).

PERIOD OF RECORD.--July 1913 to current year. Monthly contents only for some periods, published in WSP 1315-A. Published as "near Prattville" 1937-60. Prior to October 1964, records published as usable contents.

GAGE.--Nonrecording gage monitored once daily. Datum of gage is 10.23 ft (3.118 m) below mean sea level (levels by Pacific Gas and Electric Co.). Prior to June 1, 1965, nonrecording gage at site 4.7 mi (7.6 km) southeast at same datum.

EXTREMES (at 2400).--Current year: Maximum contents observed, 1,037,000 acre-ft (1.28 km³) June 24 (gage height, 4,490.04 ft or 1,368.564 m); minimum observed, 796,300 acre-ft (982 hm³) Jan. 22, 23, (gage height, 4,480.38 ft or 1,365.620 m).

Period of record: Maximum contents, 1,142,000 acre-ft (1.41 km³) June 4, 5, 10, 11, 1974 (gage height, 4,493.96 ft or 1,369.759 m); minimum, 5,230 acre-ft (6.45 hm³) Feb. 5, 1918 (gage height, 4,416.1 ft or 1,346.03 m).

REMARKS.--Lake is formed by earthfill dam; storage began in July 1913; dam raised to gage height 4,455 ft (1,357.9 m) in 1917 and 4,515 ft (1,376.2 m) in 1927. Capacity, 1,184,000 acre-ft (1.46 km³) between gage heights 4,495.5 ft (1,370.23 m), upper storage limit and 4,422 ft (1,347.8 m), bottom of lowest outlet, of which 8,950 acre-ft (11.0 hm³) is not available for release. Water is diverted by tunnel and penstock to Butt Valley Reservoir and powerhouse for use in Caribou powerplants; some water also released down North Fork Feather River (see sta 11399500). Figures given herein represent total contents at 2400 hours. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Records of contents collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS.--WSP 1931: Drainage area.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,422	8,950	4,432	34,200	4,450	220,800	4,475	672,700
4,424	10,100	4,434	49,500	4,455	294,500	4,480	787,300
4,426	11,300	4,437	74,200	4,460	376,700	4,485	908,500
4,428	13,500	4,440	101,900	4,465	467,000	4,490	1,036,000
4,430	21,200	4,445	156,400	4,470	565,500	4.495.5	1,184,000

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	966130	919180	846840	803890	809120	844180	902990	878540	999520	1035470	1001590	932470
2	963320	919430	844660	802700	809840	846600	903980	880010	1003410	1035470	999780	929960
3	960530	918430	844180	802460	811030	848050	904230	883450	1005740	1036000	998230	927200
4	957730	914690	842970	801990	812220	849500	905720	886900	1007820	1036000	996160	924440
5	954690	911690	840790	801990	812220	851690	906710	888630	1010150	1036000	993840	921430
6	951140	908460	838140	802460	821310	853870	906960	890600	1012490	1035740	991000	919680
7	949120	907960	835730	802940	822030	860200	906710	892830	1014050	1035470	989450	920680
8	947350	905220	833560	803410	825150	862880	905220	894810	1016920	1033640	987390	920180
9	945830	902240	831150	802220	828750	865560	903480	897030	1017700	1031800	985590	919430
10	944310	899510	828510	802460	830430	867510	901500	901500	1018740	1029970	983790	918930
11	943050	897280	825630	802220	831390	869710	899260	905970	1021610	1028400	981730	916930
12	941290	894310	823470	801510	832840	871180	898770	909200	1024740	1026310	980190	917180
13	940020	891590	821070	801040	835490	871430	898020	913190	1027690	1024740	977880	917180
14	938510	889120	818200	800560	840550	871180	897780	918180	1029710	1022390	975830	915930
15	937250	886410	815810	799850	841280	872410	896540	922440	1032330	1020570	974040	914690
16	936240	883950	813180	799140	842970	872650	894560	926450	1034430	1019260	971740	913690
17	934990	880750	810320	798900	843690	872900	892580	932220	1034160	1017440	969950	912940
18	933980	878290	807460	798190	844900	873630	890600	938260	1033640	1015610	969700	912690
19	932470	875590	807460	797950	846600	877060	888880	943050	1036000	1013530	970210	911940
20	931470	872160	806980	797240	847080	878290	890360	945070	1036000	1011710	967660	912190
21	929710	872410	806500	796760	847320	883450	888880	948860	1036260	1009630	964850	911940
22	928450	869710	806030	796290	845630	885180	886410	952150	1036000	1007560	962050	911940
23	927200	867030	805550	796290	843690	887150	884930	955700	1035740	1005480	959260	910950
24	925940	864340	804840	796530	840790	889620	885670	961540	1037310	1003150	956720	908950
25	924690	862140	804120	797950	838380	893570	884440	967150	1036000	1001080	953670	907710
26	923440	859950	803650	798900	839100	894810	882220	973020	1035740	1002370	951140	906960
27	922690	857030	803170	799610	840550	896790	881240	977120	1035740	1003670	947600	906220
28	923190	854120	802700	800090	842000	898270	879520	980960	1036000	1004700	944570	904970
29	921940	851690	802220	800800	---	899260	877800	985590	1036000	1006000	941790	905220
30	920680	849260	801750	801270	---	900750	877560	988420	1035740	1005220	938510	905970
31	920660	---	804600	805550	---	901500	---	994350	---	1003410	935990	---
MAX	966130	919430	846840	805550	847320	901500	906960	994350	1037310	1036000	1001590	932470
MIN	920660	849260	801750	796290	809120	844180	877560	878540	999520	1001080	935990	904970
(a)	4,485.49	4,482.59	4,480.73	4,480.77	4,482.29	4,484.72	4,483.75	4,488.39	4,489.98	4,488.74	4,486.10	4,484.90
(b)	-47,700	-71,400	-44,700	+950	+36,500	+59,500	-23,900	+116,800	+41,400	-32,300	-67,400	-30,000

CAL YR 1974 b -164,100
WTR YR 1975 b -62,400

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet, rounded to Geological Survey standards.

11399500 NORTH FORK FEATHER RIVER NEAR PRATTVILLE, CALIF.

LOCATION.--Lat 40°10'10", long 121°05'29", in NE¼SW¼ sec.28, T.27 N., R.8 E., Plumas County, Plumas National Forest, on left bank 0.5 mi (0.8 km) downstream from Almanor Dam, 4.5 mi (7.2 km) southeast of Prattville, and 9 mi (14 km) upstream from Butt Creek.

DRAINAGE AREA.--493 mi² (1,277 km²).

PERIOD OF RECORD.--June 1905 to current year (daily discharges for July 1921 to September 1936 include water diverted through Almanor-Butt Creek tunnel). Records for water year 1911 incomplete, yearly estimate published in WSP 1315-A. Published as "below Prattville" prior to 1911. Supplemental records for Almanor-Butt Creek tunnel diversion computed November 1924 to Dec. 30, 1958, as difference of flow between Butt Creek above Almanor-Butt Creek tunnel (unpublished prior to 1936 and since 1964), and Butt Creek below Almanor-Butt Creek tunnel (unpublished prior to 1936 and 1960-64).

GAGE.--Water-stage recorder and broad-crested weir. Altitude of gage is 4,380 ft (1,335 m), from topographic map. Prior to Oct. 1, 1936, nonrecording gages or water-stage recorders at several sites within 0.5 mi (0.8 km) of present site at various datums.

AVERAGE DISCHARGE (adjusted for diversion and leakage).--70 years, 916 ft³/s (25.94 m³/s), 663,600 acre-ft/yr (818 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 57 ft³/s (1.61 m³/s) Apr. 23; minimum daily, 9.5 ft³/s (0.27 m³/s) Aug. 27.

Period of record: Maximum discharge, 10,000 ft³/s (283 m³/s) Mar. 19, 1907, before construction of dam (gage height, 16.2 ft or 4.94 m, at former site), from rating curve extended above 3,700 ft³/s (105 m³/s); no flow Apr. 15, 16, 1914, at times January to April 1919, Apr. 21, 1923.

REMARKS.--Flow regulated by Lake Almanor 0.5 mi (0.8 km) upstream (see sta 11399000) and Mountain Meadows Reservoir since 1924, capacity, 24,000 acre-ft (29.6 hm³). Water diverted for power from Lake Almanor through old Almanor-Butt Creek tunnel to Butt Creek until Dec. 30, 1958. Diversion through new tunnel and Butt Valley powerhouse began Dec. 31, 1958. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1245: 1951 (yearly summaries). WSP 1285: 1952 (yearly summaries).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	34	33	35	36	37	36	39	40	35	34	35
2	35	34	33	35	37	37	36	39	40	35	34	35
3	35	34	33	35	37	37	36	40	40	35	34	35
4	35	34	33	35	37	37	36	40	40	35	34	35
5	35	34	33	36	37	37	36	39	41	35	34	35
6	35	34	33	36	37	36	36	39	41	35	34	34
7	35	34	33	36	37	35	35	39	41	35	34	34
8	35	34	33	36	37	35	35	39	41	35	34	34
9	35	34	33	36	38	35	35	39	41	35	34	34
10	35	34	33	36	38	35	36	39	41	35	34	35
11	35	34	33	36	38	35	36	38	41	34	34	34
12	35	34	34	36	38	35	36	38	41	34	34	34
13	34	34	36	36	38	35	36	38	38	34	34	34
14	34	34	36	36	38	35	36	39	35	34	34	34
15	34	34	36	36	38	35	36	39	35	34	34	34
16	34	33	36	36	38	35	36	38	35	34	36	34
17	34	33	36	36	38	35	35	38	35	34	42	34
18	34	33	36	36	38	36	35	38	35	34	39	34
19	34	33	36	36	38	36	36	39	35	34	35	34
20	34	33	36	35	38	36	36	39	35	34	34	34
21	34	33	36	35	38	36	37	39	35	34	34	34
22	34	33	36	36	38	35	37	39	35	34	34	34
23	34	33	36	36	38	35	57	39	35	34	34	35
24	36	33	36	36	38	36	41	39	35	34	34	37
25	36	33	36	36	37	36	40	39	35	34	34	37
26	36	33	36	36	36	35	39	39	35	34	22	37
27	35	33	36	36	37	35	39	40	35	34	9.5	37
28	35	33	36	36	37	35	39	40	35	34	11	37
29	35	33	36	36	---	35	39	40	35	34	18	37
30	35	33	36	36	---	35	39	40	35	34	34	37
31	34	---	35	36	---	35	---	40	---	34	35	---
TOTAL	1076	1005	1080	1110	1050	1102	1122	1210	1121	1064	995.5	1048
MEAN	34.7	33.5	34.8	35.8	37.5	35.5	37.4	39.0	37.4	34.3	32.1	34.9
MAX	36	34	36	36	38	37	57	40	41	35	42	37
MIN	34	33	33	35	36	35	35	38	35	34	9.5	34
AC-FT	2130	1990	2140	2200	2080	2190	2230	2400	2220	2110	1970	2080
MEAN a	1,443	1,937	1,534	687	416	240	1,476	640	1,363	1,416	1,811	1,139
AC-FT a	88,700	115,300	94,290	42,260	23,110	14,760	87,850	39,350	81,110	87,050	111,400	67,800

CAL YR 1974 TOTAL 18783.0 MEAN 51.5 MAX 339 MIN 27 AC-FT 37260 MEAN a 1,623 AC-FT a 1,175,000
WTR YR 1975 TOTAL 12983.5 MEAN 35.6 MAX 57 MIN 9.5 AC-FT 25750 MEAN a 1,178 AC-FT a 852,900

a Adjusted for diversion through Butt Valley powerhouse and leakage from Almanor-Butt Creek tunnel No. 1.

11400500 BUTT CREEK BELOW ALMANOR-BUTT CREEK TUNNEL, NEAR PRATTVILLE, CALIF.

LOCATION.--Lat 40°11'12", long 121°11'11", in NW¼NW¼ sec.22, T.27 N., R.7 E., Plumas County, on right bank 400 ft (122 m) downstream from outlet of old tunnel from Lake Almanor to Butt Creek, and 2.2 mi (3.5 km) southwest of Prattville.

DRAINAGE AREA.--69.3 mi^2 (179.5 km^2).

PERIOD OF RECORD.--October 1936 to September 1959, October 1964 to current year. Published as "below tunnel No. 1" 1938-40. Records for water years 1937-38, published in WSP 1515.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,400 ft (1,341 m), from topographic map. Prior to Oct. 5, 1937, at site 200 ft (61 m) downstream at datum 4 ft (1.2 m) lower.

AVERAGE DISCHARGE (natural flow of Butt Creek, adjusted for leakage from Almanor-Butt Creek tunnel No. 1).--39 years (including records for sta 11400000 Butt Creek above Almanor-Butt Creek tunnel, near Prattville for water years 1960-64), 84.4 ft^3/s (2.390 m^3/s), 61,150 acre-ft/yr (75.4 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 563 ft^3/s (15.9 m^3/s) May 14 (gage height, 2.18 ft or 0.664 m); minimum daily, 29 ft^3/s (0.82 m^3/s) Sept. 4-7.

Period of record: Maximum discharge, 3,830 ft^3/s (108 m^3/s) Dec. 23, 1964 (gage height, 5.87 ft or 1.789 m), from rating curve extended above 1,400 ft^3/s (39.6 m^3/s); minimum daily, 29 ft^3/s (0.82 m^3/s) Sept. 4-7, 1975.

REMARKS.--No regulation above station. Howell-Bunger valve in conduit from Lake Almanor to Butt Valley powerhouse is opened for short periods several times a year causing sharp peaks. Wallack ditch, above station, diverts several cubic feet per second during each irrigation season into Yellow Creek basin. Leakage from Almanor-Butt Creek tunnel No. 1 was 7,950 acre-ft or 9.80 hm^3 (corrected) during water year 1974 and 8,220 acre-ft (10.1 hm^3) during the current year. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	70	65	69	53	95	120	232	391	84	35	31
2	56	65	67	69	59	104	117	275	368	83	36	30
3	56	65	95	68	68	101	116	334	346	82	34	30
4	56	64	123	67	70	94	111	292	333	80	33	29
5	56	63	76	66	72	93	107	246	336	79	33	29
6	56	63	71	68	72	99	102	248	334	77	33	29
7	56	73	69	75	73	112	97	283	312	76	33	29
8	58	73	67	91	79	126	96	327	287	75	33	39
9	59	67	66	77	114	123	93	359	257	74	32	54
10	59	66	66	72	114	112	94	374	239	74	32	57
11	57	65	67	69	95	102	94	413	222	74	32	58
12	56	64	75	68	85	98	102	430	204	72	32	56
13	56	62	75	68	111	95	115	446	194	71	31	56
14	58	60	70	67	122	91	134	474	188	71	31	56
15	60	60	69	67	98	90	117	450	181	74	31	55
16	61	60	67	66	88	89	110	422	170	76	31	55
17	61	60	66	66	87	86	108	427	157	72	31	54
18	62	67	65	66	85	92	113	445	146	72	40	55
19	62	62	65	66	86	156	123	458	142	70	38	55
20	62	60	65	66	91	141	135	402	132	67	36	55
21	62	82	67	66	83	120	159	339	123	66	34	55
22	62	76	64	66	89	112	173	331	117	66	34	53
23	62	69	61	66	82	105	166	335	112	65	33	53
24	62	68	61	67	79	104	248	356	123	64	31	54
25	62	71	65	67	79	225	266	348	114	63	31	54
26	63	69	64	69	79	171	199	329	101	63	31	54
27	63	67	58	64	83	137	183	339	96	63	31	54
28	86	66	64	67	88	122	191	348	93	62	31	54
29	70	66	67	72	---	114	201	360	90	59	31	54
30	65	65	69	71	---	121	215	368	85	36	31	54
31	76	---	66	64	---	132	---	390	---	35	31	---
TOTAL	1896	1988	2155	2130	2384	3562	4205	11180	5993	2145	1016	1451
MEAN	61.2	66.3	69.5	68.7	85.1	115	140	361	200	69.2	32.8	48.4
MAX	86	82	123	91	122	225	266	474	391	84	40	58
MIN	56	60	58	64	53	86	93	232	85	35	31	29
AC-FT	3760	3940	4270	4220	4730	7070	8340	22180	11890	4250	2020	2880

CAL YR 1974 TOTAL 64645 MEAN 177 MAX 1450 MIN 54 AC-FT 128200
WTR YR 1975 TOTAL 40105 MEAN 110 MAX 474 MIN 29 AC-FT 79550

11401112 NORTH FORK FEATHER RIVER BELOW BELDEN DAM, CALIF.

LOCATION.--Lat 40°04'18", long 121°09'46", in SE¼SW¼ sec.26, T.26 N., R.7 E., Plumas County, Plumas National Forest, on left bank 0.2 mi (0.3 km) downstream from Belden Dam, 0.4 mi (0.6 km) upstream from Deadwood Canyon, and 6.2 mi (10.0 km) northeast of Belden.

DRAINAGE AREA.--612 mi^2 (1,585 km^2).

PERIOD OF RECORD.--October 1969 to current year. July 1959 to September 1969 in files of Pacific Gas and Electric Co.

GAGE.--Water-stage recorder. Datum of gage is 2,811.00 ft (856.793 m) above mean sea level (levels by Pacific Gas and Electric Co.).

AVERAGE DISCHARGE (including diversion to Belden powerhouse).--6 years, 1,321 ft^3/s (37.41 m^3/s), 957,100 acre-ft/yr (1.18 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,040 ft^3/s (86.1 m^3/s) Nov. 18 (gage height, 8.89 ft or 2.710 m); minimum daily, 58 ft^3/s (1.64 m^3/s) Feb. 26, Apr. 19.

Period of record: Maximum discharge, 3,040 ft^3/s (86.1 m^3/s) Nov. 18, 1974 (gage height, 8.89 ft or 2.710 m); minimum daily, 12 ft^3/s (0.34 m^3/s) June 15, 1971.

REMARKS.--Flow regulated by Belden Reservoir 0.2 mi (0.3 km) upstream, Lake Almanor (see sta 11399000), Butt Valley Reservoir, and Mountain Meadows Reservoir, combined capacity, 1,267,000 acre-ft (1.56 km^3). Diversion through tunnel to Belden powerhouse began on Aug. 27, 1969. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1430	1320	2100	1200	499	125	816	157	147	141	138	63
2	1530	1260	2250	1010	497	144	829	157	145	138	142	60
3	1370	1240	1920	1160	605	299	1020	157	147	141	140	62
4	1480	2340	1130	1110	410	840	1050	155	148	139	141	62
5	1490	2610	1800	733	413	949	1280	153	150	138	142	65
6	1500	2660	2050	889	645	931	1700	154	145	138	139	64
7	1420	2550	2210	740	385	406	1690	158	148	139	143	62
8	1460	2510	2360	1450	238	217	1960	147	147	139	143	61
9	1490	2720	2480	1210	106	205	2030	151	145	140	139	62
10	1290	2690	2520	992	140	187	2070	155	150	141	135	60
11	1410	2690	2510	785	502	265	1640	157	148	141	141	62
12	1390	2690	2490	979	305	810	1670	158	143	138	140	62
13	1440	2670	2540	1100	120	1070	1970	159	146	142	139	62
14	1480	2620	2420	854	167	1460	305	151	143	143	140	62
15	1470	2670	2160	1410	192	1220	63	145	145	141	135	62
16	1320	2730	2080	1400	489	1310	63	143	143	132	141	61
17	1460	2680	2030	1310	656	1490	63	142	145	141	139	64
18	1470	2770	2170	1080	675	1160	63	145	148	144	93	61
19	1460	2770	1420	601	305	229	58	147	144	144	62	64
20	1460	2800	670	886	638	261	63	149	143	142	65	64
21	1450	2660	609	831	1620	201	61	146	146	142	59	62
22	1420	2450	750	1120	2020	209	62	146	143	141	65	63
23	1380	2660	918	1090	2100	592	61	145	145	142	66	62
24	1470	2610	878	488	2020	759	60	145	138	140	65	62
25	1440	2310	906	347	891	212	118	147	141	137	65	61
26	1440	2640	777	268	58	260	156	142	140	136	65	61
27	1410	2730	854	353	120	232	158	146	143	138	65	62
28	1080	2170	1170	142	116	115	161	141	141	138	66	61
29	1390	2750	1200	413	---	616	155	145	143	137	65	61
30	1260	2640	1220	393	---	821	146	144	139	138	64	74
31	1270	---	990	336	---	706	---	143	---	139	64	---
TOTAL	43830	74610	51582	26680	16932	18309	21541	4622	4339	4330	3306	1874
MEAN	1414	2487	1664	861	605	591	718	149	145	140	107	62.5
MAX	1530	2800	2540	1450	2100	1490	2070	159	150	144	143	74
MIN	1080	1240	609	142	58	115	58	141	138	132	59	60
AC-FT	86940	148000	102300	52920	33580	36320	42730	9170	8610	8590	6560	3720
MEAN a	1,414	2,487	1,664	861	605	591	1,824	989	1,713	1,550	1,813	1,325
AC-FT a	86,940	148,000	102,300	59,920	33,580	36,320	108,500	60,820	102,000	95,320	111,500	78.820

CAL YR 1974 TOTAL 233662 MEAN 640 MAX 2800 MIN 56 AC-FT 463500 MEAN a 1,928 AC-FT a 1,396,000
WTR YR 1975 TOTAL 271955 MEAN 745 MAX 2800 MIN 58 AC-FT 539400 MEAN a 1,405 AC-FT a 1,017,000

a Adjusted for diversion through Belden powerhouse.

11401125 INDIAN CREEK NEAR BOULDER CREEK GUARD STATION, NEAR TAYLORSVILLE, CALIF.

LOCATION.--Lat 40°10'47", long 120°36'27", in SE¼SE¼ sec.22, T.27 N., R.12 E., Plumas County, on left bank 150 ft (46 m) downstream from Antelope Dam, 1.0 mi (1.6 km) upstream from Cold Stream, 2.2 mi (3.5 km) south of Boulder Creek Guard Station, 12.1 mi (19.5 km) northeast of Genesee, and 17.1 mi (27.5 km) northeast of Taylorsville.

DRAINAGE AREA.--68.6 mi^2 (177.7 km^2).

PERIOD OF RECORD.--October 1965 to current year. June 1961 to September 1965 in reports of California Department of Water Resources.

GAGE.--Water-stage recorder and steel-lipped weir. Supplementary water-stage recorder on dam and concrete spillway. Altitude of gage is 4,930 ft (1,502 m), from topographic map. October 1965 to September 1968, at site 0.9 mi (1.4 km) downstream at different datum.

AVERAGE DISCHARGE.--10 years, 68.8 ft^3/s (1.948 m^3/s), 49,850 acre yr (61.5 hm^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 437 ft^3/s (12.4 m^3/s) May 19 (includes flow over spillway); minimum daily, 10 ft^3/s (0.28 m^3/s) many days.

Period of record: Maximum discharge, 828 ft^3/s (23.4 m^3/s) May 24, 1967 (gage height, 6.31 ft or 1.923 m, previous site and datum) and Jan. 24, 1970 (includes flow over spillway); no flow for several months in 1971-72 (caused by draining of Antelope Lake).

REMARKS.--Flow regulated since Nov. 25, 1963 by Antelope Lake, capacity, 22,500 acre-ft (27.7 hm^3) and storage in Taylor Lake since 1929, capacity, 380 acre-ft (469,000 m^3). Some diversions for irrigation upstream. See schematic diagram of North Fork Feather River basin. Records since October 1968 are combined flow of release from Antelope Dam and flow over spillway.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	10	10	10	107	10	10	10	354	42	17	24
2	10	10	10	59	107	10	10	10	356	40	24	21
3	10	10	10	107	107	10	10	10	345	37	24	19
4	10	10	10	107	107	10	10	10	318	36	24	19
5	10	10	10	107	56	10	10	11	297	35	24	19
6	10	10	10	107	10	10	10	41	288	33	24	19
7	10	10	10	107	10	10	10	71	266	32	24	19
8	10	10	10	107	10	10	10	120	232	30	24	19
9	10	10	10	107	10	10	10	177	201	28	24	19
10	10	10	10	107	10	10	10	233	175	26	24	19
11	10	10	10	107	10	10	10	286	158	26	24	19
12	10	10	10	107	10	10	10	333	148	25	24	19
13	10	10	10	107	10	10	10	357	132	24	24	19
14	10	10	10	107	10	10	10	396	121	23	24	19
15	10	10	10	107	10	10	10	435	110	22	24	19
16	10	10	10	107	10	10	10	402	101	21	24	19
17	10	10	10	107	10	10	10	393	90	21	24	19
18	10	10	10	107	10	10	10	406	82	20	24	19
19	10	10	10	107	10	10	10	437	84	19	24	19
20	10	10	10	107	10	10	10	416	82	19	24	19
21	10	10	10	107	10	10	10	332	77	18	24	19
22	10	10	10	107	10	10	10	297	72	17	24	19
23	10	10	10	107	10	10	10	304	64	16	24	19
24	10	10	10	107	10	10	10	331	60	15	24	19
25	10	10	10	107	10	10	10	354	61	14	24	19
26	10	10	10	107	10	10	10	333	58	13	24	19
27	10	10	10	107	10	10	10	333	54	12	24	19
28	10	10	10	107	10	10	10	333	50	11	24	19
29	10	10	10	107	---	10	10	341	47	10	24	19
30	10	10	10	107	---	10	10	354	44	10	24	19
31	10	---	10	107	---	10	---	354	---	10	24	---
TOTAL	310	300	310	3172	714	310	300	8220	4527	705	737	577
MEAN	10.0	10.0	10.0	102	25.5	10.0	10.0	265	151	22.7	23.8	19.2
MAX	10	10	10	107	107	10	10	437	356	42	24	24
MIN	10	10	10	10	10	10	10	10	44	10	17	19
AC-FT	615	595	615	6290	1420	615	595	16300	8980	1400	1460	1140

CAL YR 1974 TOTAL 31524 MEAN 86.4 MAX 491 MIN 10 AC-FT 62530

WTR YR 1975 TOTAL 20182 MEAN 55.3 MAX 437 MIN 10 AC-FT 40030

11401180 LITTLE GRIZZLY CREEK NEAR GENESEE, CALIF.

LOCATION.--Lat 40°00'50", long 120°45'11", in NE¼SW¼ sec.21, T.25 N., R.11 E., Plumas County, Plumas National Forest, on right bank 2 mi (3 km) south of Genesee, and 2.5 mi (4.0 km) upstream from Indian Creek.

DRAINAGE AREA.--29.6 mi² (76.7 km²).

PERIOD OF RECORD.--August 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,180 ft (1,274 m), from topographic map.

AVERAGE DISCHARGE.--11 years, 57.2 ft³/s (1.620 m³/s), 41,440 acre-ft/yr (51.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 545 ft³/s (15.4 m³/s) May 31 (gage height, 4.25 ft or 1.295 m); minimum daily, 6.6 ft³/s (0.187 m³/s) Dec. 23.

Period of record: Maximum discharge, 1,800 ft³/s (51.0 m³/s) Jan. 24, 1970 (gage height, 6.15 ft or 1.875 m), from rating curve extended above 500 ft³/s (14.2 m³/s) on basis of slope-area measurement at gage height, 5.90 ft (1.798 m); minimum daily, 3.5 ft³/s (0.099 m³/s) Sept. 10, 11, 30, 1966.

REMARKS.--Records good. No known diversion or regulation above station. See schematic diagram of North Fork Feather River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	9.5	8.0	8.4	10	46	35	73	477	41	13	9.2
2	7.2	8.5	8.0	8.3	13	51	33	92	448	39	12	8.8
3	7.4	8.2	13	8.2	12	50	32	120	419	37	12	8.6
4	7.4	7.9	23	8.4	11	41	30	110	396	35	12	8.5
5	7.3	7.7	12	8.3	10	37	27	88	408	33	12	8.2
6	7.3	7.6	10	11	9.1	36	24	80	421	31	11	8.0
7	7.2	8.3	9.7	14	8.9	45	22	90	375	29	11	7.9
8	7.9	8.4	9.1	20	10	80	21	117	319	28	11	7.9
9	8.5	8.0	8.7	13	28	64	20	152	276	26	11	7.9
10	8.2	7.8	8.5	12	23	46	21	190	247	26	11	9.5
11	8.5	7.6	8.6	10	19	34	20	223	231	25	11	9.5
12	8.1	7.5	12	9.7	24	27	22	247	221	23	10	8.8
13	7.7	7.5	13	9.3	90	24	27	286	212	22	10	8.4
14	7.6	7.4	11	9.1	54	22	35	358	205	21	10	8.3
15	7.8	7.3	10	9.0	30	20	35	348	196	22	10	8.0
16	7.9	7.1	9.6	8.9	21	19	32	312	179	24	10	7.8
17	7.5	7.4	9.2	8.7	17	18	30	340	159	22	9.9	7.7
18	7.2	8.2	8.6	8.7	15	18	30	391	136	21	13	7.8
19	7.1	7.9	8.4	8.8	17	43	34	437	120	19	15	7.8
20	7.0	7.5	8.4	8.9	22	57	37	350	102	18	13	7.7
21	7.1	16	8.4	8.9	20	42	49	262	90	17	12	7.4
22	7.2	12	7.5	8.8	17	32	59	262	82	17	12	7.3
23	7.3	9.0	6.6	8.8	16	26	58	311	74	16	11	7.3
24	7.3	8.5	7.3	8.9	16	27	84	371	76	15	11	7.2
25	7.2	9.5	8.1	9.2	17	155	106	375	69	15	10	7.2
26	7.2	8.7	7.8	9.7	18	92	76	345	60	14	10	7.1
27	7.5	8.6	8.3	8.2	22	63	60	366	54	14	9.7	7.0
28	13	8.1	8.4	8.6	33	48	57	384	51	13	9.6	7.0
29	8.6	7.8	8.5	8.9	---	38	59	400	47	13	9.7	7.0
30	8.0	8.1	8.6	8.8	---	35	64	408	44	14	9.5	6.9
31	9.6	---	8.6	8.8	---	38	---	467	---	14	9.3	---
TOTAL	241.8	253.6	296.9	300.3	603.0	1374	1239	8355	6194	704	341.7	237.7
MEAN	7.80	8.45	9.58	9.69	21.5	44.3	41.3	270	206	22.7	11.0	7.92
MAX	13	16	23	20	90	155	106	467	477	41	15	9.5
MIN	7.0	7.1	6.6	8.2	8.9	18	20	73	44	13	9.3	6.9
AC-FT	480	503	589	596	1200	2730	2460	16570	12290	1400	678	471

CAL YR 1974 TOTAL 25364.6 MEAN 69.5 MAX 855 MIN 6.6 AC-FT 50310
WTR YR 1975 TOTAL 20141.0 MEAN 55.2 MAX 477 MIN 6.6 AC-FT 39950

Peak discharge (base, 300 ft³/s).--May 18 (2000) 497 ft³/s (4.12 ft); May 31 (2030) 545 ft³/s (4.25 ft).

11401180 LITTLE GRIZZLY CREEK NEAR GENESEE, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: August 1964 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 20.0°C July 24; minimum, freezing point on several days during December to February.
Period of record:
Water temperatures: Maximum (1964-73, 1974 to current year), 21.5°C July 31, Aug. 1, 1973; minimum, freezing point on many days during winter period of most years.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	8.0	6.0	5.0	1.0	0.5	0.5	0.5	0.5	0.0	4.5	3.0
2	11.5	9.0	5.5	4.0	3.0	1.0	0.5	0.0	0.5	0.0	5.0	3.0
3	12.0	10.0	5.0	3.0	4.0	2.5	0.5	0.0	1.0	0.5	5.0	3.0
4	11.0	9.0	4.0	2.5	3.5	2.0	1.0	0.5	0.5	0.5	5.5	3.0
5	9.0	6.5	3.5	2.0	3.0	1.5	1.0	1.0	0.5	0.0	4.5	3.5
6	8.5	5.5	4.0	2.0	3.5	2.0	1.0	0.5	0.5	0.5	5.0	3.5
7	9.0	6.0	5.0	3.0	3.0	2.0	1.5	1.0	1.0	0.5	4.0	3.0
8	10.0	8.0	5.0	3.5	2.0	1.0	2.0	0.5	0.5	0.5	5.0	2.0
9	9.5	7.5	3.5	2.5	1.5	0.5	1.0	0.5	0.5	0.5	5.0	3.5
10	9.0	6.5	3.5	2.5	1.5	0.5	2.0	1.0	1.0	0.5	5.0	3.5
11	8.5	6.0	3.5	2.0	3.5	1.5	1.5	1.0	1.5	1.0	5.0	3.0
12	8.5	5.5	4.0	2.5	4.5	2.5	1.0	0.5	1.5	0.5	4.5	2.0
13	8.5	5.5	4.0	2.5	3.0	1.0	1.0	0.5	3.0	0.5	3.5	2.5
14	8.5	5.5	5.0	3.5	3.5	1.5	1.0	0.5	3.5	2.5	5.0	2.0
15	8.5	6.0	5.0	3.5	4.0	2.5	1.5	0.5	3.0	1.0	4.5	2.0
16	8.5	6.0	4.5	2.5	3.0	2.0	1.5	0.5	2.0	1.0	3.0	0.5
17	8.5	6.0	3.5	2.5	2.5	1.0	1.5	0.5	2.0	0.5	3.5	2.0
18	8.5	6.0	5.0	3.5	2.0	0.5	1.5	0.5	3.0	0.5	4.5	3.0
19	9.0	6.5	3.5	2.5	2.0	0.5	1.5	0.5	3.0	2.0	4.0	3.0
20	8.5	6.5	4.5	2.0	2.5	1.5	1.5	0.5	3.5	1.5	5.5	3.0
21	7.0	5.0	5.0	4.0	3.0	1.5	1.5	0.5	1.5	0.5	3.5	0.5
22	6.0	4.0	4.0	2.0	1.5	0.5	1.5	0.5	1.5	0.5	3.0	1.0
23	6.0	3.5	2.0	1.0	1.0	0.5	2.5	1.0	3.0	0.5	5.0	2.0
24	6.5	4.0	2.5	1.5	1.5	0.0	2.0	1.0	3.5	1.0	5.0	3.5
25	7.0	4.5	3.0	1.5	1.0	0.5	2.0	1.0	4.0	2.0	4.5	2.5
26	7.5	5.0	2.0	1.5	1.0	0.5	2.0	1.0	4.5	2.0	4.5	2.0
27	9.0	6.5	2.0	1.5	1.5	0.0	1.0	0.0	5.0	3.0	4.0	2.0
28	7.5	6.0	2.0	1.0	1.0	0.0	1.5	0.0	5.0	3.5	3.5	1.0
29	6.5	5.5	1.0	0.5	1.5	0.0	0.5	0.0	---	---	5.0	1.5
30	6.5	5.0	1.5	0.5	1.0	0.0	1.5	0.0	---	---	6.0	2.0
31	6.5	6.0	---	---	0.5	0.0	1.0	0.0	---	---	4.5	2.0
MONTH	12.0	3.5	6.0	0.5	4.5	0.0	2.5	0.0	5.0	0.0	6.0	0.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.0	1.5	7.5	2.5	8.5	5.0	14.0	7.5	16.0	10.0	13.0	9.0
2	5.5	1.5	7.0	2.0	9.0	4.5	13.5	7.0	19.0	11.0	13.5	8.5
3	3.5	1.5	4.0	3.0	10.0	4.5	14.0	7.5	17.0	11.5	13.5	9.5
4	2.0	1.5	5.5	1.5	11.0	5.0	15.0	9.0	16.5	11.0	14.0	10.0
5	3.5	1.0	6.5	2.5	11.5	5.0	17.0	10.0	16.5	10.5	15.5	10.0
6	4.0	2.0	8.0	2.5	11.0	5.5	16.5	10.5	16.0	11.5	15.5	10.5
7	3.0	0.5	8.0	2.0	11.0	5.0	18.5	11.0	15.5	10.0	14.5	10.5
8	4.0	1.5	8.0	2.0	11.0	5.0	17.0	10.0	16.5	10.5	14.5	11.5
9	5.5	1.0	8.0	2.5	11.5	5.0	18.5	11.5	16.5	10.5	15.0	11.5
10	5.0	2.0	7.0	2.5	12.0	5.5	15.5	12.0	16.0	10.5	14.0	12.0
11	6.0	2.5	7.5	3.0	12.5	5.5	17.5	12.0	16.5	11.5	14.5	11.0
12	7.0	2.0	7.5	2.5	13.0	6.0	18.5	11.5	16.5	11.5	15.0	11.0
13	7.0	2.5	8.0	2.5	13.5	6.5	17.0	12.0	16.5	11.5	14.5	11.5
14	5.0	2.5	7.5	2.5	16.0	7.0	17.0	11.5	16.5	11.5	14.0	10.5
15	5.0	1.5	6.5	3.0	14.5	7.5	14.0	12.0	16.5	12.0	14.0	10.5
16	5.5	2.0	8.0	3.0	14.0	7.0	16.0	12.5	17.5	11.0	14.0	10.0
17	6.0	1.5	8.0	3.0	11.0	8.0	15.5	11.5	15.0	11.5	14.5	10.0
18	7.0	2.5	8.0	3.0	10.0	4.5	16.5	12.0	14.0	12.0	14.0	11.5
19	5.5	3.0	7.0	3.0	10.0	7.0	17.5	12.0	13.0	11.0	14.0	11.0
20	7.5	2.0	4.0	2.5	13.5	7.5	19.5	12.0	14.0	9.5	14.5	11.5
21	6.5	3.0	8.0	3.0	14.0	7.0	18.0	12.5	14.0	12.0	12.5	10.0
22	6.0	2.0	8.5	3.5	14.5	7.5	19.5	12.5	14.5	10.0	13.0	9.5
23	5.0	2.5	9.0	3.5	13.5	8.0	18.0	13.0	15.5	10.5	13.0	9.5
24	4.5	2.5	9.0	3.0	9.5	6.5	20.0	13.0	16.0	11.0	13.0	9.0
25	4.5	2.0	8.5	2.5	12.5	5.0	18.0	12.0	16.0	11.0	13.0	10.0
26	5.0	2.0	9.0	3.5	13.0	5.5	18.0	13.0	15.5	11.5	12.0	9.0
27	7.0	2.5	9.5	4.0	13.5	7.0	18.0	12.5	14.5	10.5	12.0	8.0
28	7.0	2.5	9.0	4.0	14.0	7.5	17.5	12.0	14.0	10.5	11.5	7.5
29	7.0	2.5	9.5	4.0	14.5	8.5	17.0	12.5	14.0	9.5	12.0	7.5
30	7.0	2.5	11.5	4.0	13.5	8.0	15.5	11.0	13.5	9.0	12.0	8.0
31	---	---	11.5	4.5	---	---	15.5	10.5	13.0	8.5	---	---
MONTH	7.5	0.5	11.5	1.5	16.0	4.5	20.0	7.0	19.0	8.5	15.5	7.5

11401200 INDIAN CREEK NEAR TAYLORSVILLE, CALIF.

LOCATION.--Lat 40°02'53", long 120°49'01", in SE¼NW¼ sec.12, T.25 N., R.10 E., Plumas County, on right bank 0.3 mi (0.5 km) upstream from Montgomery Creek, and 2.3 mi (3.7 km) southeast of Taylorsville.

DRAINAGE AREA.--526 mi² (1,362 km²).

PERIOD OF RECORD.--May 1957 to September 1973, October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,580 ft (1,091 m), from topographic map. Prior to Oct. 22, 1963, at site 1.0 mi (1.6 km) downstream at different datum.

AVERAGE DISCHARGE.--17 years, 376 ft³/s (10.65 m³/s), 272,400 acre-ft/yr (336 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 2,870 ft³/s (81.3 m³/s) May 15; minimum daily, 47 ft³/s (1.33 m³/s) Oct. 1-3.

Period of record: Maximum discharge, 30,200 ft³/s (855 m³/s) Feb. 1, 1963 (gage height, 10.65 ft or 3.246 m, site and datum then in use), from rating curve extended above 3,000 ft³/s (85.0 m³/s) on basis of slope-area measurements at gage heights 10.3 ft (3.14 m) and 10.65 ft (3.246 m); minimum daily, 13 ft³/s (0.37 m³/s) Aug. 2-4, 1961.

Flood of Dec. 23, 1955, reached a stage of 11.5 ft (3.50 m), from floodmarks, site and datum then in use (discharge unknown).

REMARKS.--Flow partly regulated by Antelope Lake (see sta 11401120) and storage in Taylor Lake since 1929, capacity, 380 acre-ft (46,900 m³). Some diversions for irrigation upstream. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	71	66	62	164	315	530	1600	1350	210	64	69
2	47	70	66	64	169	374	513	1800	1230	195	69	69
3	47	70	73	155	176	409	515	2200	1170	185	72	65
4	49	68	134	208	188	408	491	2100	1110	177	71	63
5	50	67	112	190	206	396	460	1670	1070	166	71	63
6	50	65	88	180	154	398	418	1440	1030	154	70	63
7	50	65	82	182	87	481	382	1700	1000	143	68	63
8	50	63	76	205	90	641	380	2020	1090	133	68	62
9	51	63	72	232	179	627	349	2340	996	123	68	61
10	51	63	70	194	199	530	370	2600	828	117	68	66
11	51	63	70	197	167	453	370	2790	751	114	67	71
12	51	63	75	188	206	382	397	2780	732	109	67	69
13	51	64	87	180	613	370	545	2790	682	105	68	72
14	51	65	82	179	431	323	831	2800	649	99	66	74
15	52	65	80	176	291	305	772	2870	617	98	65	68
16	52	65	79	175	244	300	702	2670	572	101	65	66
17	52	65	78	174	204	284	636	2600	527	97	65	64
18	52	64	72	170	188	273	669	2300	477	96	72	64
19	52	64	69	170	199	423	901	1920	475	93	88	64
20	53	66	69	168	227	540	913	1630	448	88	86	63
21	54	92	70	168	196	496	1320	1490	407	84	82	62
22	54	102	69	168	182	360	1580	1510	370	81	82	62
23	54	83	63	157	183	397	1460	1490	361	79	78	62
24	55	75	59	162	179	420	1690	1380	331	77	75	62
25	57	76	72	170	178	900	1560	1350	323	74	74	62
26	56	74	71	170	179	771	1410	1330	299	72	72	62
27	55	72	75	171	198	692	1250	1320	273	70	71	62
28	70	69	71	179	251	566	1480	1310	255	67	69	63
29	69	67	59	174	---	504	1600	1320	237	64	69	66
30	68	66	72	159	---	484	1600	1310	223	63	69	68
31	69	---	68	175	---	556	---	1340	---	64	70	---
TOTAL	1670	2085	2349	5302	5928	14378	26100	59570	19863	3398	2209	1950
MEAN	53.9	69.5	75.8	171	212	464	870	1922	662	110	71.3	65.0
MAX	70	102	134	232	613	900	1690	2870	1350	210	88	74
MIN	47	63	59	62	87	273	349	1310	223	63	64	61
AC-FT	3310	4140	4660	10520	11760	28520	51770	118200	39400	6740	4380	3870

WTR YR 1975 TOTAL 144802 MEAN 397 MAX 2870 MIN 47 AC-FT 287200

NOTE.--No gage-height record May 1 to June 5.

11401500 INDIAN CREEK NEAR CRESCENT MILLS, CALIF.

LOCATION.--Lat 40°04'42", long 120°55'30", in SW¼SW¼ sec.25, T.26 N., R.9 E., Plumas County, on left bank 0.8 mi (1.3 km) upstream from *Dixie Creek*, and 1.5 mi (2.4 km) south of Crescent Mills.

DRAINAGE AREA.--739 mi² (1,914 km²).

PERIOD OF RECORD.--January 1906 to December 1909, September 1911 to March 1918, October 1930 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,500 ft (1,070 m), from topographic map. Prior to March 1918, nonrecording gage at site 800 ft (240 m) upstream at different datum.

AVERAGE DISCHARGE.--54 years (1906-9, 1911-17, 1930-75), 561 ft³/s (15.89 m³/s), 406,400 acre-ft/yr (501 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,830 ft³/s (137 m³/s) May 15 (gage height, 9.10 ft or 2.774 m); minimum daily, 28 ft³/s (0.793 m³/s) Oct. 1.

Period of record: Maximum discharge observed, 25,000 ft³/s (708 m³/s) Mar. 19, 1907 (gage height, 20.2 ft or 6.10 m, site and datum then in use); minimum, 1.7 ft³/s (0.048 m³/s) Aug. 25, 1931.

REMARKS.--Records good. Natural flow affected by storage in Round Valley Reservoir since 1865, capacity, 5,000 acre-ft (6.2 hm³), Taylor Lake since 1929, capacity, 380 acre-ft (469,000 m³), and Antelope Lake since November 1963 (see sta 11401120). Diversions above station for irrigation of about 11,800 acres (47.8 km²) of which 9,700 acres (39.2 km²) are in Indian and Genesee Valleys. See schematic diagram of North Fork Feather River basin.

REVISIONS (WATER YEARS).--WSP 1445: 1906-9. WSP 1931: 1956, 1958(M). WRD Calif. 1968: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	142	109	107	178	824	1,010	2,510	2,120	242	49	57
2	29	136	112	107	238	1,060	948	2,950	2,070	215	53	56
3	35	118	140	142	282	1,060	933	3,550	1,910	202	55	53
4	35	112	291	248	290	934	916	3,660	1,770	187	51	48
5	38	107	218	231	310	873	876	2,690	1,690	181	43	50
6	39	106	168	274	251	987	802	2,110	1,650	169	41	48
7	39	113	149	348	199	1,230	726	2,420	1,550	152	44	47
8	37	124	136	549	229	2,360	697	2,970	1,400	126	48	49
9	42	114	127	370	481	1,890	643	3,540	1,230	116	50	39
10	50	110	123	322	667	1,390	650	3,910	1,090	115	48	51
11	52	107	125	306	729	1,180	655	4,340	986	114	51	67
12	48	105	131	303	958	902	682	4,520	890	107	49	58
13	56	104	151	275	2,450	835	868	4,450	852	90	45	59
14	58	103	141	266	1,800	733	1,280	4,540	815	92	45	60
15	60	103	137	259	1,070	674	1,260	4,700	784	94	45	61
16	59	100	134	258	776	703	1,120	4,200	731	102	42	62
17	58	100	131	252	574	660	1,000	3,830	672	100	46	62
18	58	105	125	252	473	646	1,020	3,740	605	99	62	59
19	65	105	119	250	518	1,160	1,290	3,810	626	95	88	59
20	75	106	120	251	689	1,490	1,330	3,550	602	89	95	52
21	70	168	121	250	523	1,200	1,780	2,760	522	86	90	46
22	70	205	120	250	424	1,010	2,220	2,330	445	81	92	47
23	69	151	107	250	412	972	2,050	2,290	404	81	90	58
24	71	132	98	251	404	1,050	2,570	2,370	407	80	78	83
25	75	146	106	253	413	2,770	3,440	2,360	438	67	76	66
26	77	135	111	262	435	2,250	2,450	2,140	389	63	72	73
27	82	124	130	248	520	1,590	1,860	2,100	323	56	58	75
28	126	118	131	226	675	1,210	1,930	2,090	361	51	63	70
29	121	114	97	247	------	1,030	2,040	2,080	291	45	63	70
30	110	111	118	228	------	962	2,320	2,040	267	45	59	69
31	117	------	111	235	------	1,040	------	2,080	------	51	54	------
TOTAL	1,949	3,624	4,129	8,068	16,966	36,497	41,366	96,630	27,830	3,393	1,845	1,754
MEAN	62.9	121	133	260	606	1,177	1,379	3,117	928	109	59.5	58.5
MAX	126	205	291	549	2,450	2,770	3,440	4,700	2,120	242	95	83
MIN	28	100	98	107	178	646	643	2,040	267	45	41	39
AC-FT	3,870	7,190	8,190	16,000	33,650	72,390	82,050	191,700	55,200	6,730	3,660	3,480

CAL YR 1974 TOTAL 315,987 MEAN 866 MAX 10,100 MIN 26 AC-FT 626,800
WTR YR 1975 TOTAL 244,051 MEAN 669 MAX 4,700 MIN 28 AC-FT 484,100

Peak discharge (base, 1,500 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-13	1800	7.56	2,980	4-25	0600	8.18	3,670
3-8	1230	7.20	2,620	5-4	0430	8.39	3,920
3-19	2230	6.08	1,650	5-15	1200	9.10	4,830
3-25	1500	7.84	3,270				

11401500 INDIAN CREEK NEAR CRESCENT MILLS, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water years 1951-58 (partial-record station), October 1958 to September 1963, water years 1964-66, 1972 (partial-record station).
Water temperatures: October 1962 to current year.
Sediment records: Water years 1957-60 (partial-record station).

EXTREMES.--Current year:
Water temperatures: Maximum, 27.5°C July 24, 25; minimum, 0.5°C on several days during December to February.
Period of record:
Water temperatures (1962-65, 1966 to current year): Maximum, 28.0°C July 26-28, 1963; minimum (1962-64, 1966 to current year) freezing point on many days during most years.

REMARKS.--Clock stopped Nov. 12 to Dec. 18; range in temperature, 3.5°C to 8.5°C.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	12.5	9.5	8.0	---	---	1.0	0.5	1.0	0.5	6.5	5.0
2	17.5	13.0	11.0	7.5	---	---	1.0	0.5	1.5	0.5	8.0	4.5
3	18.0	14.0	10.5	6.5	---	---	1.0	0.5	1.5	1.0	7.5	4.0
4	18.0	13.5	9.5	6.5	---	---	0.5	0.5	1.5	1.0	7.5	4.0
5	15.5	11.0	9.5	6.0	---	---	1.5	0.5	1.5	1.5	6.0	4.5
6	15.5	9.5	9.5	6.0	---	---	3.5	1.5	4.5	1.5	7.5	5.0
7	15.5	10.0	9.0	7.5	---	---	4.5	3.5	6.5	4.5	6.5	4.5
8	15.0	12.5	9.5	7.0	---	---	4.5	2.5	6.5	5.0	6.0	3.5
9	16.0	13.0	9.0	6.5	---	---	3.0	1.5	6.0	3.5	7.0	5.0
10	16.5	12.0	9.0	6.5	---	---	5.0	2.5	5.0	3.0	7.0	4.5
11	16.0	11.0	8.5	6.0	---	---	5.0	3.5	5.0	3.5	8.5	4.5
12	16.5	11.0	---	---	---	---	4.5	2.5	3.5	2.5	8.0	3.5
13	15.5	10.5	---	---	---	---	4.5	3.0	3.0	2.0	6.0	4.0
14	15.0	9.5	---	---	---	---	4.5	2.5	4.0	3.0	9.0	3.5
15	15.0	9.5	---	---	---	---	4.0	2.0	4.0	2.0	8.0	4.5
16	15.0	10.0	---	---	---	---	5.0	3.0	5.0	3.0	7.0	4.0
17	15.0	10.0	---	---	---	---	5.0	3.0	5.0	2.5	6.0	4.0
18	15.0	9.5	---	---	---	---	5.5	3.5	5.5	3.0	8.0	5.0
19	14.5	10.0	---	---	4.0	2.0	5.5	3.0	6.0	5.0	7.0	5.5
20	14.0	9.5	---	---	4.5	2.5	6.0	3.5	7.5	3.5	8.5	4.0
21	13.0	8.5	---	---	5.0	3.0	5.5	4.0	5.5	2.5	6.0	1.5
22	13.0	8.5	---	---	4.0	2.0	5.5	3.5	6.5	2.0	6.0	1.5
23	12.5	8.5	---	---	3.5	1.0	6.5	3.5	7.5	3.0	7.0	4.0
24	12.5	8.0	---	---	2.5	1.0	6.5	4.0	7.5	4.0	7.0	5.0
25	12.5	9.0	---	---	3.0	1.0	6.0	4.5	8.5	4.5	6.5	5.0
26	13.0	9.0	---	---	3.0	1.0	6.0	4.5	8.5	4.5	7.0	2.5
27	12.0	10.0	---	---	3.0	1.0	4.5	1.5	9.5	6.0	6.5	3.0
28	11.5	9.5	---	---	1.5	0.5	2.5	1.0	9.0	5.5	6.5	1.5
29	10.0	8.5	---	---	1.0	0.5	4.0	1.0	---	---	8.5	2.0
30	10.5	8.0	---	---	1.0	0.5	3.0	0.5	---	---	9.5	4.0
31	10.0	9.0	---	---	1.0	0.5	1.5	0.5	---	---	8.0	5.0
MONTH	18.0	8.0	---	---	---	---	6.5	0.5	9.5	0.5	9.5	1.5

11401500 INDIAN CREEK NEAR CRESCENT MILLS, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	3.0	8.5	6.0	14.5	10.0	19.0	14.0	24.5	16.5	20.5	14.0
2	8.0	3.5	9.0	6.0	13.5	10.0	19.5	13.5	24.5	17.5	20.5	14.0
3	6.0	4.5	7.5	5.5	14.5	9.5	20.5	14.5	25.0	18.0	20.0	14.0
4	4.5	3.0	6.5	4.0	15.0	10.5	21.0	15.5	24.0	18.0	21.0	14.5
5	7.0	2.5	8.0	5.5	15.5	11.0	22.0	16.0	23.0	17.0	20.5	15.0
6	7.5	4.0	9.5	6.0	15.5	11.0	23.0	16.5	22.0	17.0	20.5	16.5
7	6.0	3.5	10.0	8.0	15.0	10.5	23.0	17.0	23.5	15.0	21.0	15.0
8	8.5	4.0	10.5	8.0	15.0	11.0	24.0	17.0	23.5	16.5	20.5	15.5
9	10.0	4.5	10.0	7.5	15.0	11.0	24.5	18.0	23.5	16.5	19.0	16.0
10	9.0	5.5	10.0	8.0	15.5	11.0	22.5	18.5	23.0	16.5	17.5	16.0
11	9.0	6.0	10.5	8.0	15.5	12.0	24.5	18.5	23.5	17.5	20.5	15.0
12	11.0	5.5	11.0	8.0	16.0	12.0	25.0	18.5	24.0	17.5	20.0	15.5
13	10.0	6.0	11.5	8.5	17.0	13.5	25.0	18.5	23.5	17.5	20.5	15.5
14	8.5	5.0	11.5	9.0	17.5	13.5	24.0	18.0	23.5	17.5	20.0	16.0
15	7.0	4.0	10.0	8.0	17.5	14.5	20.0	18.0	23.0	17.5	19.5	15.0
16	7.0	3.0	12.0	8.0	17.5	14.5	24.0	18.0	23.0	17.0	19.5	14.5
17	8.5	3.5	12[illegible]	9.0	16.5	14.0	24.5	18.5	20.0	17.0	19.5	14.0
18	9.5	5.5	12.[illegible]	9.5	14.0	11.0	25.5	19.0	19.5	17.5	20.0	15.5
19	8.0	7.0	11.0	9.0	13.0	11.5	26.0	19.5	19.5	17.0	21.0	15.5
20	9.5	5.0	9.0	6.5	17.5	12.0	26.0	19.5	22.5	16.5	21.0	16.5
21	8.5	5.5	11.0	6.5	17.5	14.0	26.0	20.0	20.5	17.5	20.0	14.5
22	7.5	4.5	12.5	8.5	18.5	14.5	26.5	20.0	22.5	17.0	19.5	14.0
23	7.5	5.5	13.5	9.5	18.0	15.0	27.0	20.5	22.0	17.5	20.0	14.0
24	7.0	5.0	13.5	9.5	15.0	12.0	27.5	20.5	23.0	16.5	20.0	14.5
25	5.0	3.0	13.0	8.5	16.5	11.0	27.5	20.0	23.5	17.5	20.0	14.5
26	6.0	3.5	13.5	9.0	18.0	13.5	26.5	20.5	22.0	17.0	19.5	14.0
27	9.0	4.5	14.0	9.5	18.0	13.5	26.0	23.0	20.5	16.0	19.0	14.0
28	8.5	6.0	14.0	9.5	19.0	14.0	25.0	20.0	20.5	15.5	19.0	13.0
29	8.5	5.5	14.0	9.5	19.5	14.5	23.0	18.5	21.0	14.5	19.0	13.0
30	8.0	6.0	15.0	10.0	19.0	14.5	22.0	16.5	20.0	14.5	19.0	13.0
31	---	---	15.5	10.5	---	---	24.0	16.5	19.5	14.0	---	---
MONTH	11.0	2.5	15.5	4.0	19.5	9.5	27.5	13.5	25.0	14.0	21.0	13.0

11402000 SPANISH CREEK ABOVE BLACKHAWK CREEK, AT KEDDIE, CALIF.

LOCATION.--Lat 40°00'11", long 120°57'12", in SE¼NE¼ sec.27, T.25 N., R.9 E., Plumas County, on right bank 200 ft (61 m) upstream from Blackhawk Creek, and 0.9 mi (1.4 km) southeast of Keddie.

DRAINAGE AREA.--184 mi² (477 km²).

PERIOD OF RECORD.--October 1933 to current year. Prior to October 1953, published as "at Keddie." Records for October 1911 to September 1933 at site 1.2 mi (1.9 km) downstream not equivalent owing to inflow.

GAGE.--Water-stage recorder. Datum of gage is 3,129.86 ft (953.981 m) above mean sea level.

AVERAGE DISCHARGE.--42 years, 275 ft³/s (7.788 m³/s), 199,200 acre-ft/yr (246 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,170 ft³/s (89.8 m³/s) Mar. 25 (gage height, 6.48 ft or 1.975 m); minimum daily, 39 ft³/s (1.10 m³/s) Sept. 7.
Period of record: Maximum discharge, 15,400 ft³/s (436 m³/s) Dec. 22, 1964 (gage height, 13.53 ft or 4.124 m), from rating curve extended above 5,200 ft³/s (147 m³/s) on basis of slope-area measurement at gage height 12.47 ft (3.801 m); minimum, 3.8 ft³/s (0.11 m³/s) Aug. 12, 1934.

REMARKS.--Records excellent. Flow regulated by five small reservoirs having a combined capacity of 800 acre-ft (986,000 m³). Approximately 4,600 acres (18.6 km²) irrigated above station (from information furnished by U.S. Forest Service). City of Quincy diverts about 450 acre-ft (555,000 m³) annually for municipal supply. See schematic diagram of North Fork Feather River basin.

REVISIONS (WATER YEARS).--WSP 1041: 1938(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	67	67	70	77	915	491	717	854	121	59	44
2	47	62	68	75	151	770	451	838	781	123	58	41
3	49	60	91	73	140	670	443	1130	731	125	54	40
4	46	59	233	76	135	518	444	1100	687	126	53	43
5	45	58	123	73	126	470	415	775	676	121	54	43
6	44	61	100	89	121	500	371	661	670	103	54	41
7	45	63	90	115	136	907	339	697	616	115	55	39
8	46	83	84	285	176	2010	312	844	535	102	57	40
9	53	68	80	169	735	1210	302	1000	457	98	54	43
10	53	64	78	131	668	811	322	1110	402	97	52	53
11	51	62	77	116	467	596	323	1210	383	93	53	62
12	49	62	78	105	730	496	350	1230	366	90	52	55
13	47	62	87	99	2660	457	424	1260	344	85	46	53
14	48	61	82	94	1100	413	530	1390	330	85	45	54
15	48	61	80	92	552	376	477	1330	326	85	44	50
16	51	61	77	89	398	405	412	1120	306	95	46	49
17	53	62	76	86	308	342	373	1150	288	90	47	48
18	52	63	74	85	258	411	374	1210	272	86	55	46
19	53	64	72	85	295	1390	408	1260	257	80	78	45
20	51	63	71	85	463	1170	447	1060	235	77	75	45
21	50	103	71	85	329	744	556	782	217	74	67	44
22	49	112	71	85	269	606	644	727	203	71	69	43
23	51	82	68	84	244	500	585	763	189	71	62	40
24	52	75	62	85	239	497	1150	856	197	65	58	40
25	52	89	67	87	242	2380	1470	856	201	61	56	41
26	52	81	67	94	257	1270	855	756	183	61	52	41
27	53	74	87	93	297	793	656	778	170	62	52	40
28	85	71	91	77	400	595	635	797	160	60	43	41
29	73	68	76	86	---	507	642	814	154	58	42	44
30	62	68	80	73	---	490	680	810	135	62	44	46
31	71	---	71	84	---	541	---	846	---	60	44	---
TOTAL	1628	2089	2599	3025	11973	23368	15881	29877	11325	2702	1680	1354
MEAN	52.5	69.6	83.8	97.6	428	754	529	964	378	87.2	54.2	45.1
MAX	85	112	233	285	2660	2380	1470	1390	854	126	78	62
MIN	44	58	62	70	77	342	302	661	135	58	42	39
AC-FT	3230	4140	5160	6000	23750	46350	31500	59260	22460	5360	3330	2690

CAL YR 1974 TOTAL 162150 MEAN 444 MAX 8170 MIN 33 AC-FT 321600
WTR YR 1975 TOTAL 107501 MEAN 295 MAX 2660 MIN 39 AC-FT 213200

Peak discharge (base, 1,700 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-13	0900	6.36	3,020	4-24	2030	5.97	2,570
3-8	1000	5.92	2,510	5-19	1700	5.82	2,400
3-25	0930	6.48	3,170				

11403000 EAST BRANCH OF NORTH FORK FEATHER RIVER NEAR RICH BAR, CALIF.

LOCATION.--Lat 40°00'38", long 121°13'03", in SW¼NE¼ sec.20, T.25 N., R.7 E., Plumas County, Plumas National Forest, on left bank 0.5 mi (0.8 km) upstream from mouth, and 1.3 mi (2.1 km) west of Rich Bar.

DRAINAGE AREA.--1,025 mi² (2,655 km²).

PERIOD OF RECORD.--October 1950 to September 1961, 1965-67 (annual maximum), December 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,300 ft (701 m), from topographic map. Prior to Nov. 29, 1950, at site 30 ft (9 m) downstream at same datum.

AVERAGE DISCHARGE.--18 years (1950-61, 1968-75), 1,139 ft³/s (32.26 m³/s), 825,200 acre-ft/yr (1,017 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,920 ft³/s (196 m³/s) Mar. 25 (gage height, 9.32 ft or 2.841 m); minimum daily, 115 ft³/s (3.26 m³/s) Oct. 1.

Period of record: Maximum discharge, 48,300 ft³/s (1,370 m³/s) Dec. 22, 1964 (gage height, 16.56 ft or 5.048 m), from rating curve extended above 15,000 ft³/s (425 m³/s) on basis of study of upstream and downstream peak discharges; minimum, 39 ft³/s (1.10 m³/s) Sept. 6, 7, 1955, July 28, Aug. 23, 1961.

REMARKS.--No storage or diversion between stations on Indian and Spanish Creeks and station near Rich Bar.

COOPERATION.--Records furnished by Pacific Gas and Electric Co. and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1245: 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	237	232	235	355	1550	1830	3520	3270	466	158	153
2	116	240	229	245	541	2140	1710	4040	3110	443	160	153
3	118	222	259	310	554	2140	1650	4880	2900	420	157	150
4	125	211	545	400	553	1810	1660	5180	2700	408	157	147
5	122	206	507	380	550	1650	1590	3960	2600	399	153	145
6	125	203	364	480	515	1690	1470	3120	2560	364	148	145
7	128	215	313	760	429	2260	1360	3360	2430	348	146	143
8	128	246	288	1160	536	4890	1270	4030	2190	326	152	142
9	134	235	271	780	1420	3840	1200	4780	1980	290	153	140
10	140	220	260	570	1760	2710	1200	5280	1770	288	152	145
11	145	216	256	514	1470	2140	1220	5780	1640	283	148	172
12	142	212	265	484	1790	1790	1260	6000	1520	270	154	175
13	140	209	282	445	5800	1610	1480	5970	1450	255	153	164
14	147	211	270	423	5000	1480	1990	6180	1400	236	149	161
15	147	209	260	407	3750	1340	2040	6270	1360	246	149	163
16	150	208	255	402	2110	1370	1820	5630	1280	260	147	160
17	150	206	250	392	1560	1300	1660	5290	1190	259	148	157
18	147	215	245	387	1180	1300	1630	5260	1080	243	170	157
19	145	218	245	385	1240	2550	1870	5350	1050	230	217	152
20	157	215	243	383	1360	3330	2000	4950	1020	221	240	152
21	157	250	246	382	1400	2420	2470	3930	926	213	221	144
22	155	284	246	380	1020	2040	3080	3370	820	202	219	140
23	155	286	234	378	880	1830	2930	3330	741	198	213	140
24	158	270	212	380	840	1830	3680	3520	720	192	195	154
25	160	274	209	385	840	5380	5490	3550	775	184	185	168
26	163	282	233	398	867	4420	3880	3210	715	171	180	167
27	166	262	272	403	964	2930	2910	3140	633	168	172	171
28	210	249	306	350	1270	2260	2840	3170	569	165	162	168
29	246	239	247	371	---	1930	2960	3170	556	158	159	167
30	211	234	246	347	---	1780	3270	3130	515	154	160	171
31	216	---	239	365	---	1870	---	3210	---	159	154	---
TOTAL	4718	6984	8529	13681	40554	71580	65420	135560	45470	8219	5231	4666
MEAN	152	233	275	441	1448	2309	2181	4373	1516	265	169	156
MAX	246	286	545	1160	5800	5380	5490	6270	3270	466	240	175
MIN	115	203	209	235	355	1300	1200	3120	515	154	146	140
AC-FT	9360	13850	16920	27140	80440	142000	129800	268900	90190	16300	10380	9260

CAL YR 1974 TOTAL 563131 MEAN 1543 MAX 22200 MIN 99 AC-FT 1117000
WTR YR 1975 TOTAL 410612 MEAN 1125 MAX 6270 MIN 115 AC-FT 814400

11403500 BUCKS LAKE NEAR BUCKS LODGE, CALIF.

LOCATION.--Lat 39°53'45", long 121°12'10", in NW¼ sec.33, T.24 N., R.7 E., Plumas County, Plumas National Forest, in intake tower No. 2 upstream from dam on Bucks Creek, 2 mi (3 km) northwest of Bucks Lodge, and 15 mi (24 km) west of Quincy.

DRAINAGE AREA.--28.6 mi^3 (74.1 km^2).

PERIOD OF RECORD.--1927-28 (year-end contents only, published in WSP 1315-A), October 1928 to current year. Prior to October 1954, published as Bucks Creek Reservoir near Bucks Ranch.

GAGE.--Water-stage recorder and nonrecording gage monitored once daily. Datum of gage is at mean sea level (levels by Feather River Power Co.).

EXTREMES.--Current year: Maximum contents, 105,200 acre-ft (130 hm^3) July 11 (elevation, 5,156.79 ft or 1,571.790 m); minimum, 56,700 acre-ft (69.9 hm^3) Apr. 29 (elevation, 5,127.82 ft or 1,562.960 m).
Period of record: Maximum contents, 105,800 acre-ft (130 hm^3) June 23, 1938 (elevation, 5,157.1 ft or 1,571.88 m); minimum, 12,330 acre-ft (15.2 hm^3) Feb. 27, 1929 (elevation, 5,090.7 ft or 1,551.65 m).
NOTE.--Water year 1974, maximum and minimum contents at 2400 hrs were published.

REMARKS.--Reservoir is formed by concrete-faced, rockfill dam completed in 1927; storage began in May 1927. Capacity, 101,400 acre-ft (125 hm^3) between elevations 5,064.75 ft (1,543.736 m), sill of outlet gate and 5,154.85 ft (1,571.198 m), spillway crest, above mean sea level. Released water flows down Bucks Creek to Lower Bucks Lake, where it enters tunnel that discharges into Grizzly Creek, then to Bucks Creek powerhouse. Figures given herein represent total contents, of which 274 acre-ft (338,000 m^3) is not available for release. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Records of contents collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,064.75	274	5,075	2,400	5,100	21,200	5,125	52,500
5,066	388	5,080	4,740	5,105	26,600	5,130	60,000
5,068	635	5,085	7,920	5,110	32,500	5,140	75,900
5,070	977	5,090	11,700	5,115	38,800	5,150	93,000
5,072	1,440	5,095	16,200	5,120	45,500	5,160	111,200

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69714	61994	59693	62304	58027	61223	64952	57575	80721	103392	97938	83937
2	69232	61839	59845	62458	58328	61377	64637	57726	81902	103576	97400	83427
3	68753	61530	60457	62458	58630	61377	64325	58177	83087	103944	96861	83087
4	68274	61377	60610	62613	58630	61223	64013	58630	84277	104128	96502	82577
5	67955	61223	60610	62613	58782	61070	63857	58934	85647	104313	95789	82071
6	67478	60917	60764	62768	58782	60917	63545	59238	86851	104497	95433	81564
7	66844	60917	60764	63077	58630	61377	63077	59693	88232	104682	94898	81058
8	66686	61070	60917	63233	58934	61530	62768	59845	89273	104867	94366	80554
9	66369	61223	60917	63233	59238	61839	62458	60304	90319	105051	93835	80051
10	66210	61223	61070	62922	59389	61994	61994	60764	91192	105051	93481	79716
11	66053	61223	61070	62613	59541	62149	61530	61377	92071	105236	92950	79381
12	65895	61070	61223	62304	60304	62149	61223	62149	92950	105051	92598	78880
13	65738	61070	61223	61994	60610	62149	60917	62768	93835	104682	92071	78547
14	65424	60917	61223	61685	61070	61839	60764	63545	94898	104497	91544	78048
15	65266	60764	61377	61377	61070	61530	59997	64325	95789	104128	91192	77548
16	64952	60610	61377	61223	61223	61530	59693	65109	96502	104128	90668	77052
17	64794	60457	61377	60917	61223	61377	59389	65895	97400	103759	90319	76556
18	64637	60304	61530	60457	61377	61377	59086	66844	98118	103576	90144	76059
19	64481	59997	61530	59997	61530	61839	58630	67955	98659	103209	89795	75566
20	64169	59845	61530	59541	61685	61994	58328	68753	99020	102843	89446	75073
21	64013	60304	61530	59238	61685	61994	58027	69392	99563	102476	89099	74416
22	63857	60150	61685	58934	61530	62149	57726	70036	100105	102293	88752	73926
23	63545	59997	61685	58478	61223	62304	57951	71001	100469	101926	88232	73437
24	63233	59845	61850	58117	60917	63077	58177	71611	101016	101562	87712	72947
25	62922	59845	61850	57726	60610	63857	57876	72621	101380	101198	87195	72459
26	62768	59541	61850	57274	60610	64013	57575	72947	101926	100833	86851	72135
27	62458	59389	62149	56973	60764	64169	57274	73600	102293	100287	86334	71811
28	62613	59541	62149	56973	60917	64325	56973	74580	102659	99743	85989	71163
29	62613	59541	62149	56973	---	64481	56973	75730	102843	99382	85475	70679
30	62304	59541	62149	56973	---	64637	57124	76886	103209	98839	84962	70197
31	62304	---	62304	57274	---	64952	---	78048	---	98478	84448	---
MAX	69714	61994	62304	63233	61685	64952	64952	78048	103209	105236	97938	83937
MIN	62304	59389	59693	56973	58027	60917	56973	57575	80721	98478	84448	70197
(a)	5,131.5	5,129.7	5,131.5	5,128.2	5,130.6	5,133.2	5,128.1	5,142.1	5,155.7	5,153.1	5,145.1	5,136.5
(b)	-7,890	-2,760	+2,760	-5,030	+3,640	+4,040	-7,830	+20,900	+25,200	-4,730	-14,000	-14,300

CAL YR 1974 b -28,200
WTR YR 1975 b 0

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet, rounded to Geological Survey standards.

11404500 NORTH FORK FEATHER RIVER AT PULGA, CALIF.

LOCATION.--Lat 39°47'39", long 121°27'03", in SW¼NE¼ sec.6, T.22 N., R.5 E., Butte County, Plumas National Forest, on left bank between railroad and highway bridges, 0.5 mi (0.8 km) downstream from Flea Valley Creek and Pulga, and 1.5 mi (2.4 km) downstream from Poe Dam.

DRAINAGE AREA.--1,953 mi^2 (5,058 km^2).

PERIOD OF RECORD.--October 1910 to current year. Monthly discharge only for some periods and yearly estimates for water years 1911 and 1938, published in WSP 1315-A. Prior to October 1960, published as "at Big Bar."

GAGE.--Water-stage recorder. Datum of gage is 1,304.88 ft (397.727 m) above mean sea level (levels by Pacific Gas and Electric Co.). Prior to Oct. 1, 1937, at site 1.1 mi (1.8 km) upstream at different datum. Oct. 1, 1937, to Sept. 30, 1958, at present site at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE (including diversion through Poe powerhouse).--65 years, 3,013 ft^3/s (85.33 m^3/s), 2,183,000 acre-ft/yr (2.69 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 9,460 ft^3/s (268 m^3/s) May 15 (gage height, 14.80 ft or 4.511 m); minimum daily, 50 ft^3/s (1.42 m^3/s) Oct. 1, Jan. 5.

Period of record (prior to diversion to Poe powerhouse): Maximum discharge, 72,400 ft^3/s (2,050 m^3/s) Dec. 23, 1955 (gage height, 35.60 ft or 10.851 m, present datum), from rating curve extended above 34,000 ft^3/s (963 m^3/s); minimum daily, 235 ft^3/s (6.66 m^3/s) Oct. 31, 1932.

1958 to current year: Maximum discharge, 73,000 ft^3/s (2,070 m^3/s) Dec. 22, 1964 (gage height, 35.80 ft or 10.912 m), from rating curve extended above 34,000 ft^3/s (965 m^3/s); minimum daily, 33 ft^3/s (0.93 m^3/s) June 25, 1961.

REMARKS.--Records good. Flow regulated by Lake Almanor (see sta 11399000), Bucks Lake (see sta 11403500), Mountain Meadows Reservoir, Butt Valley Reservoir, and five forebays, combined capacity, 1,386,000 acre-ft (1.71 km^3). Diversion through Poe powerhouse began on May 29, 1958. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Gage-height record and seven discharge measurements furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 931: 1938(M), 1940. WSP 1515: 1935.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	56	55	52	144	806	136	1800	4940	67	60	56
2	53	55	56	51	221	233	130	2870	4670	66	60	54
3	57	55	82	51	107	92	126	3360	4790	66	60	55
4	56	53	81	51	116	87	125	3800	5060	63	58	55
5	54	54	61	50	94	86	125	3170	4950	64	58	56
6	54	56	57	61	87	97	119	2140	4800	63	59	56
7	54	59	59	64	111	242	113	2010	4410	62	58	53
8	54	59	58	106	235	3770	111	3120	3030	62	58	52
9	54	56	58	66	544	3000	108	4130	2350	64	59	54
10	54	56	56	60	523	1100	108	4100	1670	64	59	54
11	54	56	57	58	155	268	109	5050	1130	62	59	54
12	54	56	57	56	326	143	109	5800	94	60	58	57
13	54	55	59	54	6340	129	108	6240	70	61	58	55
14	54	55	56	53	3300	123	221	6700	214	62	58	55
15	53	55	56	53	580	114	265	8000	528	64	58	56
16	52	55	56	53	147	130	1120	7340	70	66	58	58
17	52	55	56	53	119	127	1020	5160	70	64	59	54
18	54	58	56	54	107	290	611	5140	571	63	64	55
19	55	57	56	54	120	1490	813	5160	276	63	63	56
20	55	55	55	54	140	2760	1300	5160	69	61	60	55
21	55	66	56	54	116	926	1930	3260	65	62	59	57
22	55	62	56	53	106	465	2930	3030	67	61	59	56
23	55	58	54	52	98	228	2810	3060	68	60	57	55
24	56	57	54	52	95	245	4680	4050	72	61	57	55
25	53	59	54	52	93	5270	6720	3560	70	60	55	54
26	55	101	53	54	94	4070	4520	2960	67	60	54	53
27	56	56	68	53	93	1690	3270	3360	67	60	55	54
28	62	57	70	52	430	494	3000	3250	67	60	56	52
29	56	55	56	54	---	174	2550	4530	67	60	54	56
30	54	55	54	53	---	152	1990	4800	68	60	55	57
31	56	---	52	68	---	144	---	4860	---	60	56	---
TOTAL	1690	1742	1814	1751	14661	28945	41277	130970	44440	1931	1801	1649
MEAN	54.5	58.1	58.5	56.5	523	934	1376	4225	1481	62.3	58.1	55.0
MAX	62	101	82	106	6340	5270	6720	8000	5060	67	64	58
MIN	50	53	52	50	87	86	108	1800	65	60	54	52
AC-FT	3350	3460	3600	3470	29080	57410	81870	259800	88150	3830	3570	3270
MEAN a	1,784	2,944	2,021	1,532	3,342	5,086	5,667	8,418	5,334	2,368	2,334	1,993
AC-FT a	109,700	175,200	124,300	94,220	185,600	312,700	337,200	517,600	317,400	145,600	143,500	118,600

CAL YR 1974 TOTAL 639103 MEAN 1751 MAX 34900 MIN 45 AC-FT 1268000 MEAN a 5,014 AC-FT a 3,630,000
WTR YR 1975 TOTAL 272651 MEAN 747 MAX 8000 MIN 50 AC-FT 540800 MEAN a 3,566 AC-FT a 2,582,000

a Adjusted for diversion through Poe powerhouse.

11404500 NORTH FORK FEATHER RIVER AT PULGA, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: July 1963 to June 1966, water year 1972 (partial-record station).
Water temperatures: October 1962 to current year.
EXTREMES.--Current year:
Water temperatures: Maximum, 21.5°C July 25, 27; minimum, 1.5°C Jan. 31.
Period of record:
Water temperatures: Maximum (1963-64, 1965-66, 1967 to current year), 24.0°C July 21, 22, 1971, Aug. 8-11, 1972; Aug. 1, 2, 1973; minimum (1963-65, 1966 to current year), 0.5°C Jan. 4, 1972.
REMARKS.--Clock stopped Oct. 31 to Dec. 13; range in temperature, 6.5°C to 12.0°C.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	15.0			---	---	3.0	2.5	3.5	2.0	6.5	6.0
2	17.0	15.5			---	---	4.0	2.5	4.0	3.0	8.0	6.5
3	17.5	16.0			---	---	4.0	4.0	4.0	4.0	8.5	7.0
4	17.0	16.0			---	---	4.5	4.0	5.0	4.0	8.5	7.5
5	16.0	14.5			---	---	4.5	4.5	5.0	4.5	8.5	7.5
6	16.0	14.0			---	---	5.5	4.5	5.5	5.0	8.0	7.5
7	16.0	14.0			---	---	7.0	5.5	5.5	5.0	8.0	7.5
8	16.5	15.0			---	---	7.5	7.0	6.0	5.0	7.5	6.5
9	16.5	15.0			---	---	7.0	6.5	6.5	5.0	8.0	6.5
10	16.0	14.5			---	---	6.5	6.0	6.5	5.0	8.0	7.5
11	16.0	14.5			---	---	6.0	6.0	7.0	6.0	9.5	8.0
12	15.5	14.0			---	---	6.0	5.5	6.5	5.5	9.0	7.5
13	15.5	14.0			---	---	6.0	5.5	5.5	4.0	8.5	7.5
14	15.5	13.5			7.5	7.0	6.0	5.5	4.5	4.0	8.5	7.0
15	15.5	13.5			7.5	6.5	6.0	5.0	5.0	4.0	8.5	7.5
16	15.5	13.5			7.0	6.5	6.0	5.0	5.5	4.5	7.5	6.5
17	16.0	14.0			7.0	6.5	5.0	4.0	5.5	4.0	7.5	7.0
18	16.0	14.0			7.0	6.0	5.5	4.5	5.0	4.5	9.0	7.5
19	15.5	14.0			6.5	6.0	6.0	5.0	6.0	5.0	9.0	7.5
20	15.5	14.0			7.0	6.0	5.5	4.5	6.5	5.5	8.0	8.0
21	14.5	13.0			7.0	6.5	6.0	5.0	5.5	4.0	8.0	7.5
22	14.0	12.5			6.5	6.0	6.0	5.0	5.0	3.5	7.5	7.0
23	14.5	13.0			6.0	5.0	6.0	5.0	6.0	4.0	8.0	7.0
24	14.5	13.0			5.0	4.0	6.0	5.0	6.0	4.5	9.0	8.0
25	14.5	13.0			5.0	4.5	6.0	5.0	6.5	5.0	9.0	7.5
26	14.5	13.5			5.0	4.5	5.5	5.0	6.5	5.0	7.5	6.5
27	14.5	14.0			5.5	5.0	5.0	3.0	7.0	5.5	7.0	6.5
28	14.0	13.0			5.5	4.0	3.5	3.0	6.5	5.5	8.0	6.5
29	13.5	13.0			4.0	3.0	3.5	3.0	---	---	9.5	7.0
30	13.0	12.5			4.0	3.5	3.0	2.5	---	---	10.5	8.0
31	---	---			3.5	2.5	3.0	1.5	---	---	10.5	8.5
MONTH	17.5	12.5			---	---	7.5	1.5	7.0	2.0	10.5	6.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	8.0	9.5	8.5	13.5	12.0	16.0	13.0	19.5	16.5	19.5	17.0
2	10.0	8.5	10.5	9.5	13.0	12.0	16.5	13.0	19.5	16.5	19.5	17.0
3	9.5	9.0	10.5	9.5	13.0	12.0	17.0	13.5	19.5	16.5	20.0	17.5
4	9.0	8.5	9.5	7.5	13.5	12.0	17.0	14.0	19.5	16.5	20.0	17.5
5	8.5	7.0	8.5	7.5	14.5	13.0	17.0	14.5	19.5	16.5	20.5	18.0
6	8.0	7.5	9.5	8.5	14.5	13.0	17.5	14.5	19.5	17.0	20.5	18.0
7	8.5	7.0	10.5	9.5	14.5	13.5	18.0	15.5	19.5	16.5	20.0	17.5
8	9.5	8.0	11.5	10.5	14.0	13.0	18.5	15.5	19.5	16.5	20.0	18.0
9	10.5	8.0	11.5	11.0	14.0	13.0	19.5	16.0	19.5	16.5	20.0	18.5
10	10.5	8.0	11.5	10.5	14.0	13.0	19.0	16.5	19.5	16.5	20.0	18.5
11	11.0	8.5	11.5	11.0	15.5	13.5	19.5	17.0	19.5	16.5	20.0	18.0
12	10.5	8.0	11.5	10.5	17.0	13.5	19.5	16.5	19.5	17.0	20.0	18.5
13	11.0	8.5	11.5	10.5	17.0	14.0	19.5	16.5	19.5	17.0	20.0	18.5
14	9.5	9.0	11.5	11.0	18.0	14.5	19.5	16.5	19.5	17.0	20.0	18.0
15	9.0	7.5	11.5	11.0	18.0	14.5	18.5	17.0	20.0	17.5	20.0	18.0
16	7.5	7.0	11.0	10.0	18.0	15.0	19.0	16.5	20.0	17.5	19.5	17.5
17	8.0	7.0	12.0	11.0	17.5	15.0	19.0	16.0	19.0	17.5	19.0	16.5
18	9.5	7.5	11.5	11.0	16.5	15.0	19.5	16.5	18.5	17.5	19.0	17.5
19	9.5	9.0	11.5	11.0	16.5	14.5	19.5	17.0	18.5	17.0	19.0	17.0
20	9.5	9.0	11.0	9.5	17.0	14.5	19.5	17.0	19.0	16.5	19.5	17.0
21	9.5	9.0	9.5	9.0	17.0	13.5	20.0	17.0	18.5	17.0	19.0	16.5
22	9.5	9.0	11.0	9.0	17.0	14.0	20.5	17.0	19.5	17.0	19.0	17.0
23	9.0	8.5	12.0	11.0	17.0	14.5	20.5	18.0	19.5	17.0	19.0	17.0
24	9.0	8.5	12.0	11.5	16.5	14.0	20.5	18.0	20.0	17.0	18.5	16.5
25	8.5	7.0	12.0	10.5	15.5	13.0	21.5	18.0	20.0	17.5	18.5	16.5
26	7.0	6.5	11.5	10.5	15.5	12.5	21.0	18.0	20.0	17.5	18.0	16.0
27	8.5	7.0	11.5	11.0	16.0	13.0	21.5	18.0	19.5	17.5	17.5	15.0
28	8.5	8.0	12.0	11.5	16.0	13.0	21.0	18.0	19.5	17.5	17.0	15.0
29	9.0	8.5	12.5	11.0	16.5	13.0	20.5	18.5	19.0	16.5	17.0	15.0
30	9.0	8.5	13.0	11.5	16.0	13.0	20.0	17.0	19.5	17.0	17.0	15.0
31	---	---	13.5	12.0	---	---	20.0	17.0	19.5	17.0	---	---
MONTH	11.0	6.5	13.5	7.5	18.0	12.0	21.5	13.0	20.0	16.5	20.5	15.0

11405300 WEST BRANCH FEATHER RIVER NEAR PARADISE, CALIF.

LOCATION.--Lat 39°47'12", long 121°33'42", in SE¼SE¼ sec.6, T.22 N., R.4 E., Butte County, on right bank 0.6 mi (1.0 km) upstream from Griffin Gulch, and 4.0 mi (6.4 km) northeast of Paradise.

DRAINAGE AREA.--110 mi² (285 km²).

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,370 ft (418 m), from topographic map. Prior to June 1, 1970, on left bank at same datum.

AVERAGE DISCHARGE.--18 years, 328 ft³/s (9.289 m³/s), 237,600 acre-ft/yr (293 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,470 ft³/s (127 m³/s) Feb. 13 (gage height, 11.17 ft or 3.405 m); minimum daily, 1.1 ft³/s (0.031 m³/s) Sept. 8, 9, 17, 18, 23.
Period of record: Maximum discharge, 26,300 ft³/s (745 m³/s) Dec. 22, 1964 (gage height, 26.2 ft or 7.99 m, from floodmarks), from rating curve extended above 14,000 ft³/s (396 m³/s); minimum, 0.3 ft³/s (0.008 m³/s) Aug. 31, Sept. 1, 2, 1960, Sept. 8, 1962.

REMARKS.--Records good. Dewey, Miners, and Hendricks Canals divert from headwaters of West Branch Feather River into Butte Creek basin for power development at DeSabla and Centerville plants of Pacific Gas and Electric Co. Upper Miocene Canal diverts about 50 ft³/s (1.42 m³/s) to Lime Saddle powerplant. Flow regulated by Round Valley Reservoir, usable capacity, 5,000 acre-ft (6.16 hm³) and Philbrook Reservoir, capacity, 5,010 acre-ft (6.18 hm³).

REVISIONS.--WRD Calif. 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	11	1.6	[illegible]	216	406	514	524	1140	119	3.5	2.1
2	1.8	2.7	1.6	5.5	458	649	463	622	1040	103	2.7	2.2
3	1.8	1.8	176	4.3	173	564	460	810	958	91	2.5	1.7
4	1.8	1.7	650	4.4	234	460	452	812	849	82	2.2	1.5
5	1.8	1.6	113	4.5	115	417	445	624	896	73	2.0	1.4
6	1.8	1.5	43	84	112	487	394	552	965	60	1.9	1.4
7	1.7	4.7	23	152	265	1020	361	588	847	49	1.7	1.3
8	1.7	15	16	547	856	2030	371	698	762	41	1.7	1.1
9	1.7	2.7	9.5	189	1950	1440	342	760	718	32	1.7	1.1
10	1.9	1.9	7.5	83	977	967	339	827	671	25	2.0	1.2
11	1.9	1.9	6.0	50	546	706	328	936	564	23	6.7	1.3
12	1.8	1.8	7.7	38	884	565	344	1040	518	24	5.2	1.4
13	1.7	1.7	37	32	3130	492	370	1140	471	21	1.9	1.3
14	6.0	1.6	12	28	1300	431	439	1240	522	17	1.5	1.3
15	58	1.6	12	26	726	401	370	1250	549	18	1.4	1.2
16	31	1.6	10	25	510	434	325	1120	516	58	1.4	1.2
17	27	1.6	8.9	25	375	384	289	1170	471	28	1.4	1.1
18	28	5.4	6.7	24	300	818	276	1270	388	23	17	1.1
19	3.8	5.1	4.9	30	397	2150	279	1280	319	21	30	1.2
20	1.5	2.6	3.9	30	586	1330	289	1110	276	17	15	1.2
21	1.3	75	4.0	28	372	944	336	847	235	13	6.0	1.2
22	1.2	71	8.7	27	291	799	371	863	234	12	15	1.2
23	1.2	12	3.8	25	249	636	373	908	235	11	6.6	1.1
24	1.2	4.4	2.1	23	273	774	1260	1010	261	10	3.1	1.2
25	1.2	7.4	2.6	26	284	2710	1250	981	249	9.1	2.2	1.2
26	1.3	7.8	2.1	33	284	1400	797	931	206	7.6	1.8	1.2
27	1.6	3.6	78	19	290	960	639	999	183	6.4	7.1	1.2
28	28	2.1	85	11	323	743	592	1030	169	6.5	3.7	1.3
29	8.0	1.9	21	16	---	629	568	1110	138	15	2.0	1.3
30	2.4	1.8	13	8.2	---	593	570	1120	132	9.9	1.7	1.3
31	8.4	---	8.7	14	---	589	---	1160	---	5.4	1.5	---
TOTAL	234.3	256.5	1379.3	1617.9	16476	26908	14206	29332	15482	1030.9	154.1	39.5
MEAN	7.56	8.55	44.5	52.2	588	868	474	946	516	33.3	4.97	1.32
MAX	58	75	650	547	3130	2710	1260	1280	1140	119	30	2.2
MIN	1.2	1.5	1.6	4.3	112	384	276	524	132	5.4	1.4	1.1
AC-FT	465	509	2740	3210	32680	53370	28180	58180	30710	2040	306	78

CAL YR 1974 TOTAL 178659.6 MEAN 489 MAX 8710 MIN 1.0 AC-FT 354400
WTR YR 1975 TOTAL 107116.5 MEAN 293 MAX 3130 MIN 1.1 AC-FT 212500

Peak discharge (base, 2,000 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-13	0630	11.17	4,470	3-25	0800	10.39	3,690
3-8	0600	9.45	2,770	4-24	1900	9.09	2,480
3-19	1130	9.86	3,000				

11405300 WEST BRANCH FEATHER RIVER NEAR PARADISE, CALIF.--Continued

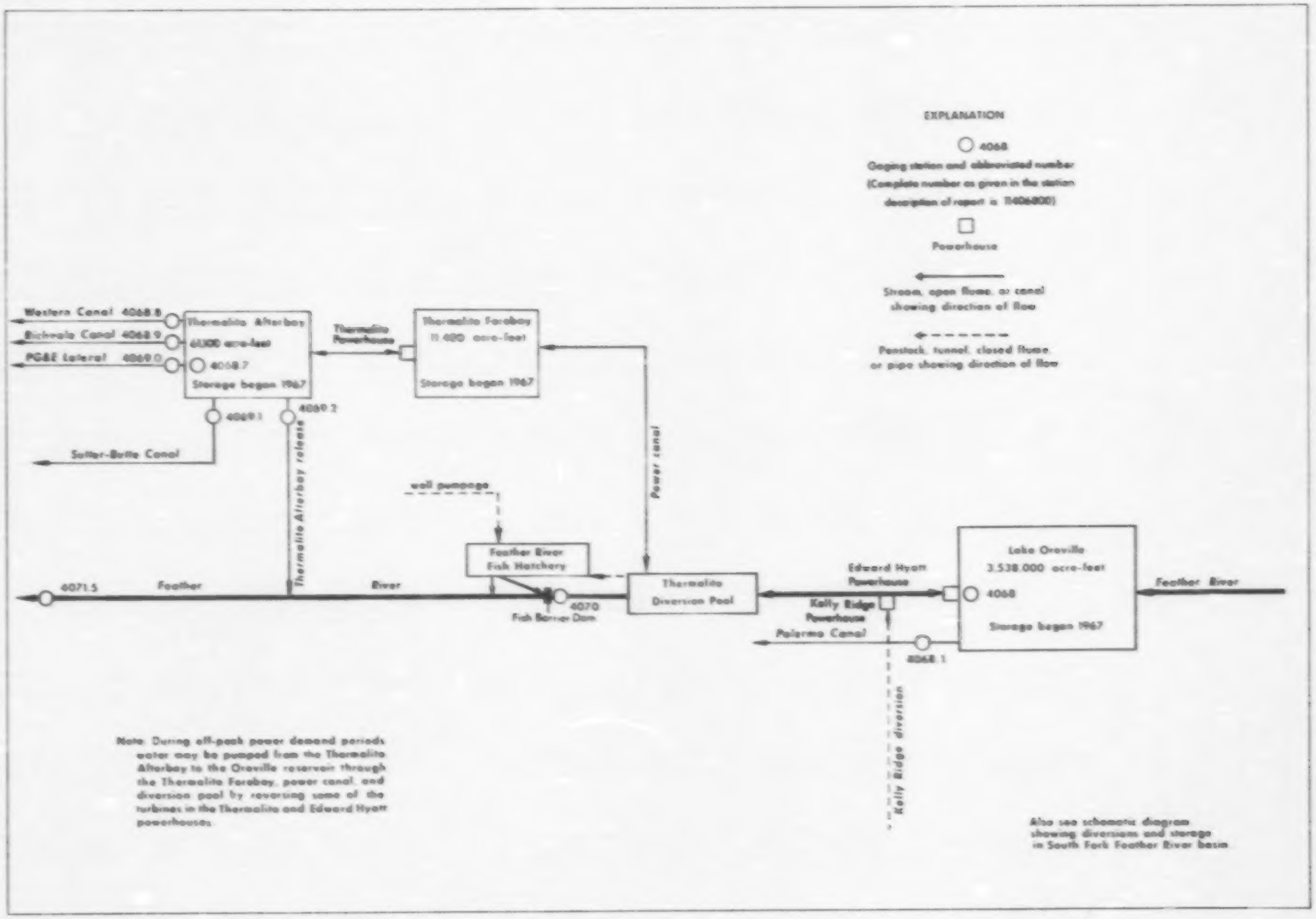
PERIOD OF RECORD.--Water temperatures: October 1962 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 27.0°C Aug. 4, 5, 7; minimum, 1.5°C Dec. 25.
Period of record:
Water temperatures: Maximum (1962-63, 1964-70, 1971 to current year), 30.5°C Aug. 18, 1967; minimum, 1.0°C on several days in 1965, 1972, and 1973.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.5	15.0	13.5	11.5	7.5	5.5	3.0	2.0	3.5	2.0	7.5	6.5
2	21.0	16.0	13.5	10.5	8.0	6.5	4.0	2.0	3.5	2.5	7.0	6.5
3	21.5	16.5	13.0	10.0	8.5	7.5	4.0	2.5	4.0	3.5	6.5	5.0
4	21.0	17.0	12.5	9.5	8.0	6.5	4.0	3.5	4.5	4.0	7.0	6.0
5	20.5	15.5	12.0	9.5	6.5	5.5	4.0	3.5	5.0	4.5	7.0	6.5
6	20.5	15.0	12.0	9.0	7.0	6.5	4.0	4.0	5.0	4.5	7.0	6.5
7	20.0	14.5	11.0	10.5	7.0	6.5	5.0	4.0	5.0	4.5	6.5	6.5
8	20.0	16.0	11.0	9.5	7.0	6.5	5.0	3.5	5.0	4.5	6.5	6.0
9	20.5	15.5	11.0	8.0	7.0	6.0	3.5	2.5	5.0	3.5	7.0	6.0
10	20.0	15.5	11.0	8.5	6.5	5.5	3.5	2.5	5.5	4.5	7.0	6.0
11	20.0	15.0	11.0	8.0	6.5	6.0	3.5	2.5	6.0	5.0	7.0	6.0
12	20.0	14.5	11.5	8.5	7.0	6.0	3.5	3.0	6.0	5.5	7.0	5.5
13	19.5	14.0	11.5	8.5	6.5	5.0	3.5	3.0	6.5	5.5	6.5	5.5
14	19.0	14.0	12.0	9.5	6.5	6.0	4.0	3.0	5.5	5.0	6.5	5.0
15	16.0	13.5	12.0	10.0	7.0	5.5	4.0	3.5	5.0	4.0	6.5	5.5
16	15.0	13.5	11.5	9.0	6.5	5.0	4.5	3.5	4.5	4.0	5.5	4.0
17	15.0	13.5	11.5	9.5	6.5	5.5	4.5	4.0	4.0	3.5	5.5	5.0
18	15.0	14.0	11.5	10.5	5.5	4.5	5.0	4.0	4.5	4.0	6.0	5.5
19	16.5	13.5	11.0	9.5	5.0	4.0	5.0	4.5	5.5	4.5	6.0	6.0
20	17.0	13.0	10.5	8.0	5.5	4.0	5.0	4.5	5.5	4.0	6.5	5.5
21	17.0	12.0	10.5	9.0	5.0	4.0	5.5	4.5	4.5	3.5	6.0	3.0
22	17.0	12.5	9.0	8.0	5.0	3.5	5.5	5.0	4.5	3.0	5.0	3.0
23	15.5	12.0	8.5	8.0	4.0	3.0	5.5	5.0	5.5	4.0	5.5	4.5
24	15.5	11.5	8.5	7.0	3.5	2.5	6.0	5.0	6.0	5.0	6.0	5.5
25	15.5	12.5	9.5	8.0	3.0	1.5	6.0	5.5	6.5	5.5	6.0	5.0
26	16.0	13.0	9.0	8.0	3.5	2.5	6.0	5.5	6.5	5.5	5.5	4.0
27	16.0	14.0	8.5	7.0	3.0	2.0	5.5	4.5	7.0	6.5	5.5	4.5
28	14.5	13.5	8.5	6.5	3.0	2.0	5.0	4.0	7.5	6.5	5.0	3.5
29	13.5	12.5	8.0	5.5	3.0	2.5	4.5	3.0	---	---	6.5	4.5
30	13.5	11.0	7.5	5.5	3.5	2.5	4.5	3.0	---	---	7.5	5.5
31	13.5	13.0	---	---	3.0	2.0	4.0	2.5	---	---	7.5	6.0
MONTH	21.5	11.0	13.5	5.5	8.5	1.5	6.0	2.0	7.5	2.0	7.5	3.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	4.5	8.5	6.0	11.0	6.5	15.5	13.5	25.5	21.5	22.5	15.5
2	6.0	5.0	8.5	6.0	11.0	7.0	15.0	13.5	26.0	21.5	22.5	15.5
3	6.5	5.5	9.0	5.5	10.5	7.0	16.0	14.0	26.5	22.0	23.5	16.0
4	5.5	3.5	5.5	4.5	11.5	8.0	16.5	14.0	27.0	22.5	24.0	16.0
5	4.0	2.5	6.5	4.5	12.0	8.5	17.0	15.5	27.0	21.5	24.5	16.5
6	5.0	3.5	7.5	5.0	12.0	8.5	17.5	15.5	26.5	21.5	24.5	15.5
7	4.5	4.0	8.5	5.5	12.0	8.5	18.5	16.5	27.0	21.5	24.5	15.0
8	5.0	4.0	9.0	6.5	12.0	8.5	19.0	17.5	26.5	22.0	24.0	18.0
9	6.5	4.5	9.0	6.5	12.0	8.5	19.5	18.0	26.0	21.5	22.5	19.0
10	7.0	5.0	9.0	6.0	12.5	10.0	20.0	18.5	26.0	21.0	21.0	18.5
11	7.5	5.5	9.0	6.0	12.5	10.5	21.5	18.5	25.0	22.5	23.5	16.5
12	8.0	5.5	9.5	5.0	13.0	11.0	22.5	18.5	24.5	22.5	24.0	18.0
13	8.0	6.5	9.5	5.0	13.5	11.5	22.5	19.0	25.0	21.0	24.5	18.5
14	8.0	5.5	9.5	5.5	14.0	12.0	23.0	19.0	25.0	20.5	24.0	15.5
15	6.5	5.0	9.0	5.0	14.0	12.5	22.0	18.5	24.5	20.0	23.5	16.5
16	6.0	5.0	9.5	5.0	14.5	12.5	20.5	19.0	24.5	20.0	24.0	16.0
17	6.5	4.5	10.0	5.5	14.0	12.5	21.5	19.5	22.5	20.0	23.5	16.0
18	7.5	5.5	10.0	5.5	13.0	11.5	22.0	20.0	21.0	19.0	23.5	18.5
19	8.0	7.0	10.0	5.5	12.5	11.5	23.5	20.0	19.0	17.5	23.5	15.0
20	8.5	6.5	9.5	5.0	13.5	11.5	23.5	20.5	19.5	17.0	24.0	16.5
21	9.0	7.0	9.5	5.5	14.5	12.5	23.5	21.0	21.5	17.0	23.5	17.0
22	8.5	6.0	10.0	6.0	14.5	13.5	23.5	21.5	20.0	17.5	23.5	16.0
23	7.5	5.5	11.0	6.5	15.0	13.0	24.5	20.5	22.0	18.0	23.5	15.0
24	7.0	5.0	10.5	6.5	14.0	11.5	25.0	22.5	24.0	18.0	23.0	15.0
25	5.5	4.0	10.5	6.5	---	---	25.0	23.5	25.0	18.5	23.5	15.0
26	6.0	4.0	11.0	7.0	13.5	11.5	25.5	22.0	25.0	18.5	22.5	15.0
27	7.5	5.0	11.0	6.5	14.0	12.5	25.5	23.5	22.5	19.0	21.5	15.0
28	7.5	5.0	11.0	6.0	15.0	13.0	25.5	24.0	22.5	18.0	21.5	14.5
29	8.0	5.0	10.5	6.0	15.5	13.5	25.5	24.0	23.0	15.0	21.5	15.0
30	8.5	6.5	11.0	6.5	15.0	13.5	24.5	22.0	23.0	15.5	21.5	15.0
31	---	---	11.0	7.0	---	---	25.0	21.5	22.5	16.0	---	---
MONTH	9.0	2.5	11.0	4.5	15.5	6.5	25.5	13.5	27.0	15.0	24.5	14.5


EXPLANATION
○ 4068
Gaging station and abbreviated number (Complete number as given in the station description of report is 11406800)
□
Powerhouse
Stream, open flume, or canal showing direction of flow
Penstock, tunnel, closed flume, or pipe showing direction of flow
Western Canal 4068.8
Richvale Canal 4068.9
PG&E Lateral 4069.0
Thermalito Afterbay
61,000 acre-feet
4068.7
Storage began 1967
Thermalito Powerhouse
Thermalito Forebay
11,400 acre-feet
Storage began 1967
4069.1
4069.2
Sutter-Butte Canal
Thermalito Afterbay release
Power canal
well pumpage
Feather River Fish Hatchery
4071.5
Feather
River
4070
Fish Barrier Dam
Thermalito Diversion Pool
Edward Hyatt Powerhouse
Kelly Ridge Powerhouse
Palermo Canal
4068.1
Kelly Ridge diversion
Lake Oroville
3,538,000 acre-feet
4068
Storage began 1967
Feather River

Note: During off-peak power demand periods water may be pumped from the Thermalito Afterbay to the Oroville reservoir through the Thermalito Forebay, power canal, and diversion pool by reversing some of the turbines in the Thermalito and Edward Hyatt powerhouses.

Also see schematic diagram showing diversions and storage in South Fork Feather River basin.

FIGURE 7.—Schematic diagram showing diversions and storage from Feather River at Lake Oroville

11406800 LAKE OROVILLE NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°32'06", long 121°28'25", in NE¼SW¼ sec.1, T.19 N., R.4 E., Butte County, near intake structure at left end of Oroville Dam on Feather River, 1.0 mi (1.6 km) downstream from North Fork Feather River, and 4.2 mi (6.8 km) east of Oroville.

DRAINAGE AREA.--3,607 mi^2 (9,342 km^2).

PERIOD OF RECORD.--November 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.47 ft (0.143 m) above mean sea level (levels by California Department of Water Resources).

EXTREMES.--Current year: Maximum contents, 3,497,909 acre-ft (4.31 km^3) June 24 (gage height, 897.48 ft or 273.552 m); minimum, 1,658,970 acre-ft (2.05 km^3) Jan. 2 (gage height, 748.00 ft or 227.990 m).

Period of record: Maximum contents, 3,536,000 acre-ft (4.36 km^3) June 4, 1973 (gage height, 899.88 ft or 274.283 m); minimum since initial storage began, 1,643,000 acre-ft (2.03 km^3) Sept. 3, 1968 (gage height, 746.27 ft or 227.463 m).

REMARKS.--Reservoir is formed by an earthfill dam with concrete chute-type sidehill spillway completed May 13, 1968; storage began Nov. 14, 1967. Usable capacity, 2,686,000 acre-ft (3.31 km^3) between elevations 640.0 ft (195.07 m), minimum power pool and 900.0 ft (274.32 m), normal maximum pool. Dead storage, 852,200 acre-ft (1.05 km^3). Total capacity at normal maximum pool, 3,538,000 acre-ft (4.36 km^3); temporary detention storage occurred at times during dam construction; maximum was 155,200 acre-ft (191 hm^3) Dec. 23, 1964. Water is released to Edward Hyatt powerhouse through penstock in left abutment of dam and to Palermo Canal through concrete tunnel also in left abutment of dam. Three of the total of six turbines in the Edward Hyatt powerplant are reversible and during periods of low power demand water is pumped at times from the river back into Lake Oroville. Records, including extremes, represent total contents at 2400 hours. See schematic diagram showing diversions and storage from Feather River at Lake Oroville.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project. Contents rounded to Geological Survey standards.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

730	1,498,000	790	2,081,000	850	2,808,000
740	1,586,000	800	2,192,000	860	2,945,000
750	1,678,000	810	2,307,000	870	3,086,000
760	1,773,000	820	2,426,000	880	3,232,000
770	1,872,000	830	2,549,000	890	3,382,000
780	1,974,000	840	2,676,000	900	3,538,000

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2379393	2069791	1823792	1667036	1663231	2026786	2687746	3124188	3409820	3466498	3211211	2975363
2	2363186	2073151	1812644	1658970	1667593	2041976	2701297	3125779	3423387	3461672	3203698	2965874
3	2344572	2077057	1798012	1662026	1670960	2055743	2715944	3127659	3439934	3458249	3190324	2959050
4	2329119	2074127	1786390	1666479	1677181	2069141	2732225	3130699	3454829	3465564	3177428	2951403
5	2327001	2066218	1772690	1669731	1681009	2081078	2749632	3129252	3466654	3464006	3163986	2945573
6	2320890	2065137	1758182	1664901	1685216	2097107	2766718	3123320	3474917	3466187	3150583	2948903
7	2307066	2064272	1747693	1666015	1689994	2115973	2781612	3117541	3484601	3465408	3145640	2954043
8	2289225	2063083	1738301	1671991	1704008	2152172	2795493	3113644	3485539	3459960	3136206	2945711
9	2269746	2067517	1728181	1671878	1727514	2182054	2810496	3113989	3483976	3454985	3132582	2935599
10	2252797	2071416	1719242	1673546	1746637	2208786	2825959	3115520	3480225	3445515	3129107	2927582
11	2236279	2068275	1712418	1679794	1759919	2219277	2841077	3126357	3475853	3434516	3120719	2921234
12	2235135	2064388	1708729	1685310	1784831	2235936	2857065	3137656	3470394	3425240	3104854	2911645
13	2230221	2059411	1712418	1682784	1844547	2245331	2873797	3148547	3458560	3421689	3088759	2908980
14	2213137	2046388	1719052	1676622	1874334	2260972	2885811	3156988	3459493	3412130	3084028	2903896
15	2198518	2031804	1725134	1668987	1892452	2277385	2900328	3166029	3468991	3403820	3075868	2891967
16	2180593	2023265	1717060	1663231	1905690	2294811	2916273	3172163	3474761	3386938	3070580	2886357
17	2161430	2021986	1706934	1663602	1915713	2299941	2933189	3178014	3479757	3376990	3071580	2880619
18	2145831	2010186	1698167	1668151	1922587	2318191	2948348	3188417	3481163	3368283	3066296	2877479
19	2143498	1998857	1697979	1672615	1936183	2346346	2965595	3197080	3483350	3357918	3054895	2875979
20	2144386	1989574	1697508	1669731	1949639	2378557	2988095	3211653	3485226	3350007	3038700	2877616
21	2130090	1977279	1700238	1666665	1960557	2402766	3001147	3223760	3490390	3339378	3028361	2878025
22	2115422	1960453	1700709	1664344	1972670	2427518	3010293	3235307	3493051	3329379	3017060	2878844
23	2100170	1945906	1696662	1667315	1980531	2446959	3025674	3244657	3494931	3322725	3015508	2878844
24	2085540	1932674	1691876	1671126	1990206	2469582	3048637	3266848	3497909	3313214	3012125	2877479
25	2077166	1917046	1695345	1675689	1998962	2523229	3080161	3289147	3494461	3298458	3005647	2872843
26	2079882	1902833	1690463	1676528	2005627	2561666	3101975	3308391	3487416	3286598	3005225	2870527
27	2083580	1887784	1682878	1673733	2007747	2590476	3117397	3319251	3476478	3279107	2996371	2869301
28	2082601	1870705	1682317	1670196	2016133	2614018	3124621	3333164	3478819	3265654	2991039	2869846
29	2077383	1855840	1686059	1667872	---	2635013	3129252	3347423	3485070	3249414	2990618	2865082
30	2073368	1840064	1678394	1665829	---	2654963	3127081	3363788	3475853	3230125	2987255	2857472
31	2072608	---	1667129	1662119	---	2673592	---	3385559	---	3224943	2983894	---
MAX	2379393	2077057	1823792	1685310	2016133	2673592	3129252	3385559	3497909	3466498	3211211	2975363
MIN	2072608	1840064	1667129	1658970	1663231	2026786	2687746	3113644	3409820	3224943	2983894	2857472
(a)	789.23	766.86	748.88	748.34	783.97	839.78	870.87	890.23	896.07	879.56	862.81	853.64
(b)	-324,392	-232,544	-172,935	-5,010	+354,014	+657,459	+453,489	+258,478	+90,294	-250,910	-241,049	-126,422
(c)	4,973	1,510	805	1,207	1,753	2,148	4,296	7,437	9,894	10,735	10,169	8,124

CAL YR 1974 b -1,135,871
WTR YR 1975 b +460,472

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11406810 PALERMO CANAL NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°31'59", long 121°28'54", in SW¼SW¼ sec.1, T.19 N., R.4 E., Butte County, on right bank 50 ft (15 m) downstream from Oroville Dam, and 4.4 mi (7.1 km) east of Oroville.

PERIOD OF RECORD.--April 1965 to current year. Daily discharge of diversion from Kelly Ridge penstock for period April 1965 to October 1968 when Kelly Ridge penstock supplied the entire flow of Palermo Canal are in files of California district office of Geological Survey.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 547.67 ft (166.930 m), levels by California Department of Water Resources. April 1965 to October 1968, water-stage recorder and Parshall flume at site of diversion from Kelly Ridge penstock, 0.4 mi (0.6 km) downstream at different datum.

AVERAGE DISCHARGE.--10 years, 12.2 ft³/s (0.346 m³/s) 8,840 acre-ft/yr (10.9 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 28 ft³/s (0.79 m³/s) several days in July to September 1967; no flow at times in 1967, 1970, 1974-75.

REMARKS.--Canal diverts from left end of Oroville Dam. Water is used for irrigation near Oroville. During period of construction of Oroville Dam, water was released from Kelly Ridge penstock to meet irrigation requirements.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	5.5	6.2	5.8		0	2.4	11	23	25	25	23
2	14	5.4	6.2	5.8		0	2.4	12	23	26	25	23
3	12	5.4	6.2	5.8		0	2.4	12	23	25	25	23
4	12	5.4	6.2	5.8		0	2.4	12	23	26	25	23
5	12	5.4	6.2	5.8		0	2.4	12	23	26	25	23
6	12	5.4	6.2	5.8		0	2.4	11	24	26	25	23
7	13	5.4	6.1	5.8		0	2.4	9.1	24	26	25	23
8	16	5.3	6.0	5.8		0	2.4	9.8	24	26	25	23
9	15	5.4	6.0	5.8		0	2.4	12	24	26	25	23
10	14	5.4	6.0	5.8		0	2.4	13	24	24	25	23
11	14	5.7	6.0	5.8		0	2.4	13	24	23	25	23
12	14	6.3	6.0	5.8		0	2.4	16	24	23	25	23
13	14	6.2	6.0	5.8		0	2.4	18	24	23	25	23
14	14	6.2	5.9	5.8		0	2.4	19	23	25	25	23
15	17	6.2	6.0	5.8		1.4	2.4	20	23	25	25	23
16	14	6.2	6.0	5.8		2.2	2.5	18	24	25	25	23
17	14	6.2	5.9	5.8		2.2	2.5	18	24	24	24	23
18	14	6.2	5.8	5.8		2.3	2.9	18	24	23	22	23
19	14	6.2	5.8	5.8		2.3	3.2	18	23	23	21	23
20	14	6.2	5.8	5.8		2.3	3.2	18	23	23	21	23
21	13	6.2	5.8	5.8		2.3	4.4	18	23	23	21	23
22	12	6.2	5.8	1.9		2.3	5.3	19	23	23	21	23
23	12	6.2	5.8	0		2.3	5.4	21	23	23	21	23
24	11	6.2	5.8	0		2.3	5.4	21	23	24	21	23
25	11	6.2	5.8	0		2.3	5.4	21	23	25	23	23
26	11	6.2	5.8	0		2.3	5.4	21	23	25	24	23
27	11	6.2	5.8	0		2.3	5.4	21	23	25	24	23
28	9.3	6.2	5.8	0		2.3	5.5	22	23	25	24	23
29	6.8	6.2	5.8	0	---	2.3	7.6	23	23	25	24	21
30	5.7	6.2	5.6	0	---	2.3	8.5	23	24	25	24	20
31	5.7	---	5.8	0	---	2.3	---	23	---	25	24	---
TOTAL	387.5	177.6	184.1	123.7	0	38.0	108.6	522.9	702	761	739	685
MEAN	12.5	5.92	5.94	3.99	0	1.23	3.62	16.9	23.4	24.5	23.8	22.8
MAX	17	6.3	6.2	5.8	0	2.3	8.5	23	24	26	25	23
MIN	5.7	5.3	5.6	0	0	0	2.4	9.1	23	23	21	20
AC-FT	769	352	365	245	0	75	215	1040	1390	1510	1470	1360

CAL YR 1974 TOTAL 4270.0 MEAN 11.7 MAX 26 MIN 3.7 AC-FT 8470
WTR YR 1975 TOTAL 4429.4 MEAN 12.1 MAX 26 MIN 0 AC-FT 8790

11406870 THERMALITO AFTERBAY NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°27'30", long 121°38'17", in NE¼SE¼ sec.33, T.19 N., R.3 E., Butte County, at dam 195 ft (59 m) northeast of centerline of outlet structure, and 5.7 mi (9.2 km) southwest of Oroville.

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 100.47 ft (30.623 m) above mean sea level (levels by California Department of Water Resources). Auxiliary water-stage recorder 90 ft (27 m) southwest of centerline of Western Canal outlet, and 7.2 mi (11.6 km) west of Oroville.

EXTREMES.--Current year: Maximum contents, 55,203 acre-ft (68.1 hm³) Dec. 5 (gage height, 136.07 ft or 41.474 m); minimum, 17,785 acre-ft (21.9 hm³) Apr. 29 (gage height, 125.08 ft or 38.124 m).
Period of record: Maximum contents, 57,300 acre-ft (70.7 hm³) May 24, 1969 (gage height, 136.56 ft or 41.623 m); minimum since initial operation began, 5,590 acre-ft (6.89 hm³) Mar. 1, 1968 (gage height, 119.09 ft or 36.299 m).

REMARKS.--Reservoir is formed by an earthfill dam completed in 1967; diversion from the reservoir began Oct. 12, 1967. Usable capacity, 61,144 acre-ft (75.4 hm³) between gage heights 120.0 ft (36.58 m) and 139.0 ft (42.37 m), extreme operating levels. Normal operating range is 123 ft (37.5 m) to 136.5 ft (41.61 m). Water is released to four canals and to the Feather River from the reservoir (see sta 11406880, 11406890, 11406900, 11406910, 11406920). Total maximum release to the four canals is approximately, 4,000 ft³/s (113 m³/s). Water is pumped, at times, from Thermalito Afterbay back into Thermalito Forebay during off-peak periods to be re-released through Thermalito powerplant for power generation during peak demand periods. Records, including extremes, represent total contents at 2400 hours. See schematic diagram showing diversions and storage from Feather River at Lake Oroville.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

120	7,054	128	25,832
122	10,792	130	32,150
124	15,157	134	46,719
126	20,171	139	68,198

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35695	34827	55034	39926	33867	41674	40889	24796	27473	45854	37568	32051
2	39669	29193	50947	43953	40703	40889	41299	24087	31456	47750	34414	36185
3	44763	23661	52765	39853	41224	41075	42276	24087	30997	48430	37568	36856
4	47591	24123	54822	34174	40111	41224	42845	23719	31292	39084	40295	40369
5	36927	31292	55203	28972	40703	42731	41411	24647	32150	36255	42541	41674
6	30704	32617	54231	31226	40591	41150	39853	25832	30250	31687	44841	35069
7	32150	34827	51729	32283	41486	43225	38575	27104	23921	28751	40295	24530
8	37496	36361	46011	33765	41299	41561	40369	29067	23805	31522	41937	24794
9	42731	30704	43616	35869	42617	41486	38938	29416	23318	33155	36255	28751
10	46403	27380	42731	33867	42541	44415	37747	29067	24677	39339	30997	28311
11	50373	30836	44686	28908	40814	44030	36679	22666	26616	44841	32450	28680
12	38070	33459	44570	23461	43684	42201	35277	20627	29864	45229	39853	30704
13	30541	36806	39669	22554	42465	47591	32751	18548	40369	39157	45932	30834
14	33155	41561	34106	27257	43073	46011	35207	21443	39596	39339	41299	30541
15	35207	46207	28468	33867	42352	44030	35625	23863	33155	37675	41674	37496
16	40889	44957	34414	38178	41561	41561	34586	26737	29703	43264	39339	37675
17	47512	38178	42807	37818	41299	48511	33765	31390	28908	43264	28830	38070
18	50496	41337	50210	33867	42352	48873	31522	33867	32684	43264	27843	36502
19	40591	43225	48318	29928	40889	52184	28093	38829	33765	41674	31522	32751
20	28845	43416	45385	31588	40554	50373	23261	39157	34896	38178	40295	27906
21	30509	45854	40369	33324	41150	52818	23805	38503	31292	38938	40288	25772
22	32617	50865	34896	35695	40554	49155	31390	37568	28688	39926	47870	23489
23	36856	50668	34242	32852	42465	47835	30932	38829	28249	36361	43493	22218
24	44222	50373	35869	28908	42731	46758	33489	32919	25414	36608	41299	22218
25	48511	52818	30314	25088	41561	46482	30089	28625	28972	39926	41711	25296
26	41486	52184	30250	21006	40554	47233	24677	23119	24654	38178	34896	25982
27	34896	52476	36502	21580	44492	48430	20251	27534	45658	31687	37425	25000
28	33087	53769	35869	22610	43493	47233	18445	29575	41224	32383	37675	22469
29	34176	54358	30932	23204	---	45035	17785	32684	32986	36502	32684	23461
30	35869	54147	34896	22807	---	42807	22357	34106	40221	34654	31292	27473
31	33493	---	42276	26829	---	40184	---	31390	---	36255	28908	---
MAX	50496	54358	55203	43953	44492	52184	42845	39157	45658	48430	47870	41674
MIN	28845	23661	28468	21006	33867	40184	17785	18548	23318	28751	27843	22218
(a)	130.40	135.82	132.85	128.33	133.17	132.29	126.80	129.77	132.30	131.20	129.00	128.54
(b)	+2,952	+20,654	-11,871	-15,447	+16,664	-5,309	-17,827	+9,053	+8,831	-5,966	-7,347	-1,435
(c)	1,265	657	306	403	560	666	1,171	1,734	2,093	2,391	2,535	2,016

CAL YR 1974 b -14,249
WTR YR 1975 b -3,068

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11406880 WESTERN CANAL AT INTAKE, NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°30'19", long 121°41'06", in SW¼NW¼ sec.18, T.19 N., R.3 E., Butte County, on left bank 500 ft (152 m) downstream from Thermalito Afterbay Dam, and 7.3 mi (11.7 km) west of Oroville.

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 100.47 ft (30.623 m) above mean sea level (levels by California Department of Water Resources).

AVERAGE DISCHARGE.--7 years, 285 ft³/s (8.071 m³/s), 206,500 acre-ft/yr (254 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,000 ft³/s (28.3 m³/s) May 18, 1974; no flow for several months in each year.

REMARKS.--Water is diverted from Thermalito Afterbay and is used for irrigation. See schematic diagram showing diversions and storage from Feather River at Lake Oroville.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	373	402	760	199			0	391	579	815	735	406
2	562	400	738	200			0	477	579	815	735	365
3	656	400	724	201			0	517	580	813	735	304
4	694	420	237	200			0	572	585	806	735	265
5	694	478	284	200			0	680	580	794	732	251
6	694	501	488	200			0	846	580	798	736	251
7	747	500	487	200			0	891	580	798	744	238
8	819	511	489	200			0	951	580	796	742	206
9	819	576	351	200			0	988	579	796	741	179
10	791	603	240	201			0	997	579	795	742	156
11	790	604	255	201			0	999	633	795	742	157
12	793	601	253	200			0	983	724	795	741	155
13	793	601	253	200			0	946	778	794	740	157
14	733	610	253	198			0	852	808	792	741	130
15	515	676	253	200			0	800	832	792	744	106
16	381	686	253	124			0	774	832	792	741	106
17	381	689	248	0			0	730	831	798	742	76
18	381	690	248	0			0	730	820	794	742	64
19	381	687	247	0			0	682	813	783	720	64
20	379	687	248	0			0	602	814	771	712	53
21	379	683	246	0			0	579	814	774	708	54
22	370	560	248	0			36	574	813	772	710	55
23	392	716	247	0			56	579	814	765	696	57
24	398	722	252	0			56	580	813	753	656	57
25	399	729	252	0			56	580	814	746	630	57
26	397	736	251	0			56	579	816	735	608	108
27	397	741	209	0			94	580	814	734	571	267
28	400	737	88	0			116	580	814	732	540	268
29	401	739	49	0	---		190	580	814	735	495	267
30	401	738	131	0	---		249	570	816	736	472	260
31	400	---	200	0	---		---	582	---	734	436	---
TOTAL	16710	18223	9462	3124	0	0	867	21785	21828	24140	21272	5199
MEAN	539	607	305	101	0	0	28.9	703	728	779	686	173
MAX	819	741	760	201	0	0	249	999	832	815	744	406
MIN	370	400	49	0	0	0	0	391	579	732	436	53
AC-FT	33140	36150	18770	6200	0	0	1720	43210	43300	47900	42190	10310

CAL YR 1974 TOTAL 138609.00 MEAN 380 MAX 1000 MIN 0 AC-FT 275100
WTR YR 1975 TOTAL 142618.00 MEAN 391 MAX 999 MIN 0 AC-FT 282900

11406890 RICHVALE CANAL AT INTAKE, NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°30'19", long 121°41'06", in SW¼NW¼ sec.18, T.19 N., R.3 E., Butte County, on right bank 500 ft (152 m) downstream from axis of Thermalito Afterbay Dam, and 7.3 mi (11.7 km) west of Oroville.

PERIOD OF RECORD.--April 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 100.47 ft (30.623 m) above mean sea level (levels by California Department of Water Resources).

AVERAGE DISCHARGE.--7 years, 117 ft³/s (3.313 m³/s) 84,770 acre-ft/yr (105 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 511 ft³/s (14.5 m³/s) May 16, 1974; no flow for several months in each year.

REMARKS.--Canal diverts from Thermalito Afterbay; water is used for irrigation. The canal is part of the Oroville project. See schematic diagram showing diversions and storage from Feather River at Lake Oroville.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17						0	403	368	373	356	253
2	17						0	403	367	368	353	243
3	16						0	404	368	368	356	244
4	17						0	404	366	368	353	243
5	16						0	404	339	368	352	201
6	16						0	441	328	368	352	179
7	16						0	491	356	368	350	179
8	17						0	491	368	371	352	182
9	17						0	486	366	370	354	190
10	9.0						0	486	366	378	354	167
11	0						0	486	367	369	351	133
12	0						0	455	384	370	352	106
13	0						0	435	391	369	349	96
14	0						0	435	390	369	351	68
15	0						0	435	387	365	352	48
16	0						0	435	387	366	352	48
17	16						0	436	389	361	350	47
18	33						0	436	388	383	347	47
19	33						0	435	389	355	357	48
20	29						0	392	388	383	347	47
21	10						8	369	389	362	347	48
22	0						36	369	389	373	347	50
23	0						54	368	389	373	324	26
24	0						54	369	391	371	311	12
25	0						53	365	392	370	311	8.6
26	0						152	365	393	371	312	0
27	0						208	372	392	371	312	0
28	0						232	369	394	371	310	0
29	0				---		353	368	392	373	310	0
30	0				---		405	369	390	371	282	0
31	0	---			---		---	367	---	364	271	---
TOTAL	279.0	0	0	0	0	0	1545	12843	11363	11398	10477	2913.6
MEAN	9.00	0	0	0	0	0	51.5	414	379	367	338	97.1
MAX	33	0	0	0	0	0	405	491	394	373	357	253
MIN	0	0	0	0	0	0	0	365	328	353	271	0
AC-FT	553	0	0	0	0	0	3060	25470	22540	22600	20780	5780

CAL YR 1974 TOTAL 53556.00 MEAN 147 MAX 511 MIN 0 AC-FT 106200
WTR YR 1975 TOTAL 50812.60 MEAN 139 MAX 491 MIN 0 AC-FT 100800

11406900 PACIFIC GAS AND ELECTRIC CO. LATERAL AT INTAKE, NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°29'22", long 121°41'12", in SE¼NW¼ sec.19, T.19 N., R.3 E., Butte County, on right bank 82 ft (25 m) downstream from axis of Thermalito Afterbay Dam, and 7.2 mi (11.6 km) west of Oroville.

PERIOD OF RECORD.--April 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 113.47 ft (34.586 m) above mean sea level (levels by California Department of Water Resources).

AVERAGE DISCHARGE.--7 years, 4.56 ft³/s (0.129 m³/s), 3,300 acre-ft/yr (4.07 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 44 ft³/s (1.25 m³/s) May 4-7, 1975; no flow for several months in each year.

REMARKS.--Flow regulated at outlet works from Thermalito Afterbay; water is used for irrigation. Records for some years include diversions from Thermalito Afterbay into Pacific Gas and Electric Co. lateral via Duncan lateral siphon. No diversion was made during the current year to Duncan lateral siphon.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								13	14	13	14	5.4
2								20	14	14	14	3.9
3								36	14	14	14	3.4
4								44	14	14	14	3.4
5								44	14	14	15	3.4
6								44	14	15	15	3.4
7								44	13	15	15	2.6
8								39	14	15	15	.70
9								34	13	14	15	0
10								28	14	15	15	0
11								24	14	14	15	0
12								24	13	15	14	0
13								24	14	15	14	0
14								24	14	15	14	0
15								20	13	14	15	0
16								17	14	15	15	0
17								18	14	14	14	0
18								17	14	14	14	0
19								17	14	14	15	0
20								16	14	14	15	0
21								16	14	15	14	0
22								15	14	15	14	0
23								15	14	15	14	0
24								15	14	15	14	0
25								15	13	15	14	0
26								15	14	15	11	0
27								16	14	15	10	0
28								16	14	15	10	0
29					---			16	13	15	10	0
30					---			16	13	14	7.9	0
31		---			---		---	16	---	14	5.4	---
TOTAL	0	0	0	0	0	0	0	716	413	450	415.3	26.20
MEAN	0	0	0	0	0	0	0	23.2	13.8	14.5	13.4	.87
MAX	0	0	0	0	0	0	0	44	14	15	15	5.4
MIN	0	0	0	0	0	0	0	13	13	13	5.4	0
AC-FT	0	0	0	0	0	0	0	1420	819	893	824	52

CAL YR 1974 TOTAL 1668.10 MEAN 4.57 MAX 41 MIN 0 AC-FT 3310
WTR YR 1975 TOTAL 2022.50 MEAN 5.54 MAX 44 MIN 0 AC-FT 4010

11406910 SUTTER BUTTE CANAL AT INTAKE, NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°27'01", long 121°39'27", in NW corner of Boga Fernandez Grant, T.18 N., R.3 E., Butte County, on left bank 675 ft (206 m) downstream from Thermalito Afterbay Dam, and 6.8 mi (10.9 km) southwest of Oroville.

PERIOD OF RECORD.--November 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 109.97 ft (33.519 m) above mean sea level (levels by California Department of Water Resources). Prior to May 1, 1970, at datum 100.50 ft (33.376 m) lower.

AVERAGE DISCHARGE.--7 years, 673 ft³/s (19.06 m³/s), 487,600 acre-ft/yr (0.01 km³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 2,110 ft³/s (59.8 m³/s) Apr. 22-24, 1968; no flow for several months in each year.

REMARKS.--Water is diverted from Thermalito Afterbay and is used for irrigation. See schematic diagram showing diversions and storage from Feather River at Lake Oroville.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	466					0	82	1760	1630	1650	1590	1210
2	501					0	174	1880	1610	1650	1590	1200
3	552					0	156	1970	1600	1600	1590	1150
4	681					0	215	2000	1590	1600	1580	1070
5	622					0	237	2030	1570	1600	1570	1040
6	622					0	236	2050	1570	1590	1560	1030
7	622					0	266	2020	1570	1590	1560	998
8	613					0	295	2010	1580	1590	1560	965
9	681					0	308	2030	1580	1610	1580	956
10	622					0	201	2030	1570	1610	1570	877
11	681					0	267	2020	1590	1610	1570	838
12	696					0	271	2000	1600	1610	1570	809
13	696					0	271	1970	1620	1600	1570	796
14	697					0	195	1930	1650	1610	1560	796
15	697					0	201	1920	1650	1610	1550	774
16	697					0	359	1850	1650	1610	1540	697
17	697					0	503	1820	1660	1590	1540	638
18	697					0	642	1820	1690	1600	1520	594
19	696					0	656	1710	1700	1620	1500	589
20	695					0	630	1630	1700	1620	1480	589
21	726					0	725	1610	1700	1620	1460	589
22	743					0	777	1600	1690	1620	1450	589
23	743					0	859	1610	1690	1610	1440	595
24	744					0	1010	1620	1700	1610	1440	523
25	733					0	1070	1630	1700	1610	1420	492
26	726					0	1170	1620	1700	1580	1350	479
27	726					0	1290	1630	1690	1580	1310	479
28	727					0	1400	1630	1690	1560	1220	479
29	715				---	0	1460	1620	1690	1560	1210	477
30	681				---	0	1590	[illegible]	1660	1580	1210	459
31	471	---			---	65	---	1610	---	1590	1230	---
TOTAL	20506	0	0	0	0	65	17684	56250	49290	49690	45900	22725
MEAN	661	0	0	0	0	2.10	589	1815	1643	1603	1481	758
MAX	744	0	0	0	0	65	1590	2050	1700	1650	1590	1210
MIN	466	0	0	0	0	0	82	1600	1570	1560	1210	459
AC-FT	40670	0	0	0	0	129	35080	111600	97770	98560	91040	45080

CAL YR 1974 TOTAL 249286.00 MEAN 683 MAX 1980 MIN 0 AC-FT 494500
WTR YR 1975 TOTAL 262110.00 MEAN 718 MAX 2050 MIN 0 AC-FT 519900

11406920 THERMALITO AFTERBAY RELEASE TO FEATHER RIVER, NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°27'23", long 121°38'10", in NW¼SE¼ sec.33, T.19 N., R.3 E., Butte County, on left bank of outlet channel 955 ft (291 m) downstream from centerline of Thermalito Afterbay Dam, and 5.7 mi (9.2 km) southwest of Oroville.

PERIOD OF RECORD.--November 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 113.47 ft (34.586 m) above mean sea level (levels by California Department of Water Resources). Prior to May 1, 1970, at datum 13.00 ft (3.962 m) lower.

AVERAGE DISCHARGE.--7 years, 4,955 ft^3/s (140.3 m^3/s), 3,590,000 acre-ft/yr (4.43 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 10,000 ft^3/s (283 m^3/s) May 12 (gage height, 6.52 ft or 1.987 m); minimum daily, 566 ft^3/s (16.0 m^3/s) Apr. 17.

Period of record: Maximum discharge, 21,600 ft^3/s (612 m^3/s) Jan. 28, 1970 (gage height, 23.30 ft or 7.102 m, previous datum); no flow for many days in 1968.

REMARKS.--Flow regulated by gates at Thermalito Afterbay outlet 955 ft (291 m) upstream. See schematic diagram showing diversions and storage from Feather River at Lake Oroville.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7140	2640	9160	2620	2150	1280	1090	7130	3180	2150	5140	4200
2	7120	2600	9140	2640	1920	1270	874	8080	3190	2150	4960	4210
3	7150	2610	9170	2630	1720	1270	695	9420	3180	2160	5200	4180
4	7150	2630	9200	2590	1480	1260	580	9510	3740	2130	5150	4180
5	7040	2640	9160	2620	1280	1270	582	9510	5610	2160	5100	4170
6	7080	2640	9190	2640	1290	1280	581	9490	7160	2150	5100	4150
7	7100	2640	9130	2650	1280	1280	580	9480	8080	2150	5040	4120
8	7140	2630	9160	2660	1270	1280	582	9470	8130	2160	5040	4190
9	7160	2600	8670	2660	1280	1250	574	9590	8120	2160	5030	4210
10	7160	2580	6650	2660	1270	1280	577	9610	8140	2170	4180	4220
11	7150	2630	4750	2600	1270	1270	569	9530	7250	3250	4170	4210
12	7040	2640	4190	2590	1270	1270	573	9760	6260	4270	4190	4200
13	7030	3360	3840	2610	1280	1280	570	9820	5350	5100	4200	4200
14	7120	6330	2660	2680	1280	1270	588	9810	4300	5160	4160	4150
15	7120	6650	2600	2660	1280	1280	577	9790	3730	5140	4220	4150
16	6900	6610	2630	2490	1280	1280	568	9720	3740	5170	4200	4140
17	6650	6590	2660	2270	1280	1280	566	8830	2570	5100	4180	4130
18	6620	6670	2660	2180	1280	1280	574	7770	2250	5080	4220	4110
19	6540	6640	2620	2130	1280	1270	568	7760	2230	5070	4250	4140
20	6510	6630	2610	2180	1290	1270	574	6850	2240	5070	4230	3320
21	6620	8290	2610	2190	1290	1280	1050	5610	2180	5080	4220	2450
22	6640	9210	2600	2210	1280	1280	1580	5230	2150	5090	4200	2450
23	6140	9160	2630	2170	1270	1280	2060	4320	2160	5080	4180	2450
24	4230	9160	2660	2140	1270	1290	2750	3450	2150	5090	4170	2460
25	2670	9200	2610	2150	1270	1280	3680	3170	2160	5120	4180	2470
26	2590	9150	2640	2150	1270	1280	4650	3180	2160	5080	4160	2470
27	2570	9170	2640	2180	1260	1280	5530	3210	2160	5050	4230	2450
28	2610	9170	2640	2220	1260	1280	6700	3200	2150	5060	4170	2460
29	2630	9220	2610	2210	---	1270	6990	3200	2140	5140	4190	2470
30	2630	9170	2640	2190	---	1260	7110	3200	2160	5100	4190	2470
31	2630	---	2650	2220	---	1270	---	3190	---	5100	4190	---
TOTAL	181880	171860	148780	74790	37900	39550	54542	221890	120020	125940	138040	107180
MEAN	5867	5729	4799	2413	1354	1276	1818	7158	4001	4063	4453	3573
MAX	7160	9220	9200	2680	2150	1290	7110	9820	8140	5170	5200	4220
MIN	2570	2580	2600	2130	1260	1260	566	3170	2140	2130	4160	2450
AC-FT	360800	340900	295100	148300	75170	78450	108200	440100	238100	249800	273800	212600

CAL YR 1974 TOTAL 2858810 MEAN 7832 MAX 18100 MIN 2000 AC-FT 5670000
WTR YR 1975 TOTAL 1422372 MEAN 3897 MAX 9820 MIN 566 AC-FT 2821000

11406920 THERMALITO AFTERBAY RELEASE TO FEATHER RIVER NEAR OROVILLE, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: May 1968 to current year.
EXTREMES.--Current year:
Water temperatures: Maximum, 24.0°C July 7-9; minimum, 5.0°C Jan. 31.
Period of record:
Water temperatures: Maximum, 28.0°C July 13, 1970; minimum, 1.5°C Dec. 13, 1972.
REMARKS.--Temperature is listed only when water is released from Thermalito Afterbay. Because of the complete regulation of the Feather River below Oroville Dam, the temperature of the water released from Thermalito Afterbay affects the temperature of the Feather River downstream from the Oroville project. Records furnished by California Department of Water Resources.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMHER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	15.5	14.0	13.5	11.0	11.0	6.0	5.5	6.0	5.5	10.5	9.0
2	15.5	15.0	14.0	13.0	11.0	11.0	6.0	5.5	6.5	6.0	10.5	10.0
3	15.0	15.0	13.5	13.0	11.0	11.0	5.5	5.5	6.5	6.5	11.5	10.5
4	15.5	15.0	13.5	13.0	11.0	11.0	6.0	5.5	7.0	6.5	12.0	10.5
5	15.5	15.0	13.5	13.0	11.0	11.0	6.0	6.0	7.0	7.0	13.0	11.0
6	15.0	15.0	13.5	13.0	11.0	10.5	6.5	6.0	7.0	7.0	12.0	11.5
7	15.5	15.0	13.5	13.0	10.5	10.0	7.0	6.5	7.0	7.0	12.0	11.5
8	15.0	14.5	13.0	12.0	10.5	10.5	8.0	7.0	8.5	7.0	12.0	12.0
9	14.5	14.0	13.0	12.0	10.5	10.0	8.0	8.0	9.0	8.5	12.0	12.0
10	14.5	14.0	13.0	12.0	10.5	10.0	8.0	7.0	9.0	9.0	12.0	12.0
11	15.0	14.5	13.0	12.0	10.0	10.0	7.0	7.0	9.5	9.0	13.5	12.0
12	15.5	14.5	13.0	12.0	10.0	10.0	7.0	7.0	9.5	9.5	13.0	12.0
13	15.5	15.0	13.0	13.0	10.0	9.5	8.0	7.0	9.5	9.5	12.0	12.0
14	15.5	15.0	13.0	13.0	9.5	9.5	8.0	7.0	10.0	9.5	12.0	11.5
15	16.0	15.5	13.0	12.0	9.5	9.5	8.0	7.0	9.5	9.0	11.5	11.5
16	15.5	15.0	12.0	11.5	9.5	9.5	7.0	7.0	9.5	9.0	11.5	11.0
17	15.5	15.0	11.5	11.5	10.0	9.5	7.0	7.0	9.0	8.5	11.0	10.5
18	15.0	14.5	11.5	11.5	10.0	9.5	7.0	7.0	9.0	8.5	11.0	10.5
19	15.0	14.5	11.5	11.5	9.5	9.5	7.0	7.0	9.0	8.5	11.0	11.0
20	15.0	14.5	11.5	11.5	9.5	9.0	7.0	7.0	9.0	9.0	11.5	11.0
21	15.0	14.0	11.5	11.5	9.0	9.0	8.0	7.0	9.0	8.0	11.5	10.5
22	14.5	13.5	12.0	11.5	9.0	8.5	8.0	8.0	8.5	8.0	10.5	10.5
23	13.5	13.0	11.5	11.0	8.5	7.0	8.0	8.0	9.5	8.0	10.5	10.0
24	13.5	13.5	11.0	10.5	7.0	6.0	8.5	8.0	9.5	8.5	10.5	10.5
25	13.5	13.5	11.5	11.0	6.5	6.0	8.5	8.0	10.0	8.5	11.5	10.5
26	13.5	13.0	11.5	11.0	6.5	6.0	8.5	8.0	10.5	9.0	11.0	10.0
27	14.0	13.5	11.0	11.0	6.5	6.5	8.0	6.5	11.0	10.0	10.5	10.0
28	14.0	13.5	11.0	11.0	6.5	6.5	6.5	6.0	10.5	10.0	10.5	9.5
29	14.0	13.5	11.0	11.0	6.5	6.0	6.5	6.0	---	---	10.5	9.5
30	14.0	13.5	11.0	11.0	6.0	5.5	6.5	5.5	---	---	11.0	10.5
31	14.0	14.0	---	---	6.0	5.5	6.0	5.0	---	---	12.0	11.0
MONTH	16.5	13.0	14.0	10.5	11.0	5.5	8.5	5.0	11.0	5.5	13.5	9.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	11.0	13.5	11.5	22.0	18.5	18.5	18.5	21.0	19.5	20.0	18.5
2	11.5	11.5	13.0	11.5	20.0	19.0	19.5	18.0	21.5	19.5	19.0	18.0
3	11.5	11.5	13.0	11.0	20.0	19.0	18.0	18.0	21.5	19.5	19.5	18.0
4	11.5	11.5	11.5	10.5	20.0	19.0	20.0	18.0	21.5	19.5	19.5	18.0
5	11.5	11.5	12.0	10.0	19.5	18.5	20.5	18.5	20.0	19.0	20.0	18.0
6	13.0	11.5	13.0	11.0	19.0	18.0	22.0	19.0	19.5	19.0	19.5	18.0
7	12.0	11.5	13.0	11.5	19.5	18.0	24.0	19.5	20.5	19.0	20.0	16.5
8	13.0	11.5	13.5	11.5	18.0	16.5	24.0	20.5	21.0	19.5	18.5	18.0
9	13.0	12.0	13.5	11.5	18.5	16.0	24.0	20.5	21.0	19.5	18.5	18.0
10	13.0	11.5	13.0	11.5	19.5	18.0	22.0	21.0	21.5	19.5	18.0	16.0
11	15.5	13.0	15.0	12.0	19.0	18.0	23.0	20.0	21.0	19.0	17.0	16.0
12	15.5	14.5	14.0	12.0	19.5	18.0	21.0	20.0	20.5	19.5	16.5	15.5
13	15.5	15.0	15.0	13.0	20.0	17.0	22.0	19.5	20.0	18.5	18.0	16.0
14	15.5	15.0	14.5	13.5	19.5	18.0	20.0	19.5	19.5	18.5	18.0	16.0
15	15.0	14.5	13.5	13.0	19.5	18.0	20.0	18.5	20.5	19.0	17.0	16.0
16	15.5	14.5	14.5	12.0	21.0	20.0	20.0	18.5	20.0	19.0	18.0	16.0
17	16.0	14.5	14.5	13.5	22.0	20.5	18.5	18.0	20.5	19.0	17.0	15.0
18	16.0	15.0	16.0	14.0	21.5	19.5	19.5	18.0	20.5	19.5	16.5	15.0
19	18.0	15.0	16.0	14.5	19.5	18.5	20.5	18.5	20.0	19.0	16.5	15.0
20	18.0	16.5	15.0	13.5	20.0	18.0	21.0	18.5	19.5	19.0	18.5	16.0
21	18.0	17.0	14.0	13.5	19.5	18.5	20.5	19.0	19.0	18.5	19.0	16.5
22	17.0	16.0	16.0	14.0	20.0	18.5	21.5	19.5	20.5	18.5	20.0	17.0
23	16.0	15.0	18.0	15.0	20.0	19.0	23.0	19.5	19.5	18.5	19.5	18.5
24	15.0	14.5	20.5	16.0	19.5	18.0	22.0	19.5	22.0	19.5	19.5	18.5
25	14.5	13.5	18.5	17.0	20.0	18.0	23.0	20.0	23.0	20.0	19.0	18.0
26	13.5	12.0	19.5	17.0	20.0	18.5	21.5	20.0	20.5	19.5	19.0	18.0
27	14.0	12.0	19.5	18.5	20.0	18.0	21.0	20.0	20.0	19.0	19.0	17.0
28	13.0	11.0	19.0	18.5	19.5	17.0	21.0	20.0	19.5	18.5	18.5	16.5
29	13.0	11.0	19.5	18.5	19.0	18.0	21.0	20.0	20.0	18.5	18.5	17.0
30	13.0	11.5	20.0	19.0	19.5	18.5	21.5	19.0	19.5	18.5	18.0	16.5
31	---	---	21.5	18.0	---	---	20.0	19.5	20.0	18.5	---	---
MONTH	18.0	11.0	21.5	10.0	22.0	16.0	24.0	18.0	23.0	18.5	20.0	15.0

11407000 FEATHER RIVER AT OROVILLE, CALIF.

LOCATION.--Lat 39°31'18", long 121°32'48", in Boga Fernandez Grant, T.19 N., R.4 E., Butte County, on right bank 300 ft (91 m) upstream from Fish barrier dam on Feather River, and 0.8 mi (1.3 km) northeast of Oroville Post Office.

DRAINAGE AREA.--3,624 mi^2 (9,386 km^2).

PERIOD OF RECORD.--October 1901 to current year. Monthly discharge only for some periods, published in WSP 1315-A. October 1934 to September 1961 published as "near Oroville." Records since October 1967 equivalent to earlier records if diversions out of Thermalito Afterbay are added to flow past station.

GAGE.--Water-stage recorder. Datum of gage is 148.97 ft (45.406 m) above mean sea level (levels by California Department of Water Resources). Jan. 1, 1902, to Dec. 15, 1912, nonrecording gages at several locations 0.2 mi (0.3 km) downstream at various datums. Dec. 16, 1912, to Sept. 30, 1934, water-stage recorder at site 0.2 mi (0.3 km) downstream at datum 139.53 ft (42.529 m) above mean sea level. Oct. 1, 1934, to June 30, 1962, water-stage recorder at site 5.0 mi (8.0 km) upstream at datum 182.02 ft (55.480 m) above mean sea level. July 1, 1962, to Sept. 30, 1964, water-stage recorder at site 0.2 mi (0.3 km) downstream at mean sea level datum.

AVERAGE DISCHARGE (adjusted for diversions into and out of, change in contents of, and evaporation from Lake Oroville, Thermalito diversion pool, Thermalito Forebay, and Thermalito Afterbay).--74 years, 5,977 ft^3/s (169.3 m^3/s), 4,330,000 acre-ft/yr (5.34 km^3/yr).

EXTREMES (River only).--Current year: Maximum discharge, 1,000 ft^3/s (28.3 m^3/s) Jan. 13 (gage height, 1.13 ft or 0.344 m); minimum daily, 272 ft^3/s (7.70 m^3/s) Feb. 16.

Period of record: Maximum discharge observed, 230,000 ft^3/s (6,510 m^3/s) Mar. 19, 1907 (elevation, 167.5 ft or 51.05 m above mean sea level); minimum daily, 89 ft^3/s (2.52 m^3/s) Sept. 19, 1972.

(Combined flow).--Current year: Maximum discharge, 1,120 ft^3/s (31.7 m^3/s) Jan. 13; minimum daily, 369 ft^3/s (10.5 m^3/s) July 25.

Period of record (since construction of Oroville Dam): Maximum discharge, 56,400 ft^3/s (1,600 m^3/s) Jan. 25, 1970; minimum daily, 222 ft^3/s (6.29 m^3/s) Sept. 19, 1972.

Flood of February 1881 reached a stage of 25 ft (7.6 m) from floodmarks, site and datum in use from Dec. 16, 1912, to Sept. 30, 1934.

REMARKS.--Flow regulated by Lake Oroville (see sta 11406800) and other powerplants and reservoirs above station. Several diversions above station for power and irrigation. Feather River Fish Hatchery diverts up to 120 ft^3/s (3.40 m^3/s) at Thermalito diversion dam 0.4 mi (0.6 km) upstream from gage. Diverted flow returns to Feather River approximately 0.3 mi (0.5 km) downstream from gage. Daily figures shown are combined figures of river flow and diversion to fish hatchery. See REMARKS for upstream stations and schematic diagrams showing diversions from Feather River at Lake Oroville and for South Fork Feather River basin.

COOPERATION.--Records collected by California Department of Water Resources under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 843: 1907(M), 1909(M), 1914-15(M), 1919(M), 1927-28(M). WSP 881: 1913-28 (yearly summaries only). WSP 1515: 1906-8. WSP 1931: Drainage area. WRD Calif. 1967: 1966. WRD Calif. 1974: 1968-70, adjusted monthly discharge.

11407000 FEATHER RIVER AT OROVILLE, CALIF.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	410	800	860	855	513	406	406	419	417	425	405	426
2	410	785	855	861	471	406	409	420	418	423	404	425
3	410	830	852	849	402	406	414	421	412	425	405	426
4	412	838	858	819	411	406	414	427	410	426	403	427
5	407	848	852	791	414	408	413	423	413	426	401	418
6	410	838	834	850	409	409	410	423	410	428	399	416
7	411	840	832	861	408	413	410	421	413	427	402	415
8	409	839	826	869	412	416	416	423	409	427	401	418
9	412	832	831	870	413	413	415	425	407	426	395	418
10	408	839	832	845	409	415	413	425	437	425	398	417
11	405	842	834	819	402	413	413	424	424	423	401	418
12	397	839	830	797	446	407	407	423	420	424	401	417
13	405	844	822	853	428	412	405	412	416	427	398	409
14	407	845	818	890	403	411	408	416	410	427	399	409
15	415	858	793	882	384	409	413	417	416	409	409	408
16	675	859	807	885	382	407	413	414	416	401	409	408
17	795	853	823	886	397	410	414	415	416	396	401	408
18	796	863	826	869	406	415	411	411	415	406	413	411
19	784	862	814	859	403	418	413	414	410	400	415	413
20	781	855	810	849	402	414	405	406	408	400	411	413
21	785	857	799	874	403	423	405	405	405	403	409	410
22	791	861	826	883	401	420	411	405	407	400	411	408
23	799	852	864	866	400	418	411	413	404	397	403	403
24	790	852	871	857	399	418	413	417	407	387	402	403
25	783	849	844	832	399	410	414	415	420	369	404	403
26	804	852	843	830	403	407	413	410	426	373	404	406
27	835	853	865	861	406	407	411	414	428	373	405	410
28	824	861	863	875	407	401	409	410	421	378	403	410
29	774	856	851	867	---	396	414	409	422	385	401	410
30	787	860	853	865	---	396	417	410	425	397	403	408
31	801	---	864	871	---	397	---	414	---	403	418	---
TOTAL	18732	25362	25944	26540	11533	12707	12340	12901	12462	12635	12533	12391
MEAN	604	845	837	856	412	410	411	416	415	408	404	413
MAX	835	863	871	890	513	423	417	427	437	428	418	427
MIN	397	785	793	791	382	396	405	405	404	369	395	403
AC-FT	37150	50310	51460	52640	22880	25200	24480	25590	24720	25060	24860	24580
MEAN a	2,607	3,679	2,968	3,084	8,486	12,370	10,330	15,080	9,115	3,358	3,607	3,107
AC-FT a	160,300	218,900	182,500	189,600	471,300	760,800	614,500	927,200	542,400	206,500	221,800	184,900

CAL YR 1974 TOTAL 665990 MEAN 1825 MAX 37300 MIN 388 AC-FT 1321000 MEAN a 9,428 AC-FT a 6,826,000
WTR YR 1975 TOTAL 196081 MEAN 537 MAX 890 MIN 369 AC-FT 388900 MEAN a 6,464 AC-FT a 4,680,000

a Adjusted for diversions in and out of, change in contents in, and evaporation from Lake Oroville, Thermalito diversion pool, Thermalito Forebay, and Thermalito Afterbay.

11407000 FEATHER RIVER AT OROVILLE, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: January to December 1906, water years 1951-53 (partial-record station), October 1953 to current year.
Specific conductance: March 1972 to current year.
Water temperatures: October 1953 to September 1954, November 1956 to current year.
Sediment records: November 1956 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 88 micromhos Feb. 3; minimum daily, 66 micromhos July 1.
Water temperatures: Maximum, 17.0°C July 26, 31, Aug. 1; minimum, 6.5°C on several days during February.
Sediment concentrations: Maximum daily, 21 mg/l Feb. 14; minimum daily, 1 mg/l on several days during October and November.
Sediment discharge: Maximum daily, 23 tons (21 tonnes) Feb. 14; minimum daily, 2.1 tons (1.9 tonnes) Oct. 29, 30.
Period of record (See REMARKS below):
Specific conductance (1972 to current year): Maximum daily, 94 micromhos Jan. 22, 1973; minimum daily, 66 micromhos June 13, 14, 1974, July 1, 1975.
Water temperatures (1956-67): Maximum, 27.0°C Sept. 10, 12, 1959; minimum, 1.5°C Dec. 27, 1959, Jan. 23-25, 1962.
Water temperatures (1968 to current year):: Maximum, 17.0°C on many days in 1971-73, 1974 to current year; minimum, 6.5°C on many days in 1971-73, 1974 to current year.
Sediment concentrations (1956-67): Maximum daily, 4,100 mg/l Feb. 1, 1963; minimum daily, 1 mg/l on many days in 1961-62, 1964.
Sediment concentrations (1967 to current year): Maximum daily, 310 mg/l Jan. 22, 1969; minimum daily, 1 mg/l on many days each year.
Sediment discharge (1956-67): Maximum daily, 1,500,000 tons (1,360,000 tonnes) Feb. 1, 1963; minimum daily, 3 tons (2.7 tonnes) Jan. 16, 17, 1962.
Sediment discharge (1967 to current year): Maximum daily, 42,100 tons (38,200 tonnes) Jan. 22, 1969; minimum daily, 0.60 ton (0.54 tonne) Sept. 19, 1972.

REMARKS.--Water-temperature data for the gaging station are obtained from a thermograph located at fish hatchery near fish barrier dam. Chemical and sediment sampling point ranges from 0.2 to 1.5 mi (0.3 to 2.4 km) downstream from gaging station. Records of discharge and temperature data furnished by California Department of Water Resources and reviewed by Geological Survey. Extremes affected by construction of Oroville Dam in 1967 and are given for two separate periods--1956-67, and 1967 to current year. Extremes for water temperatures are not included for 1968 water year (October 1967 to September 1968).

REVISIONS (WATER YEAR).--WRD Calif. 1974: 1966, sediment.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
NOV.											
06...	1500	838	7.4	2.4	2.9	.8	45	37	1.8	1.1	.1
DEC.											
03...	1430	852	8.3	3.3	3.5	1.0	49	40	2.1	.7	.0
JAN.											
03...	1430	849	8.5	3.2	3.1	1.1	49	40	2.1	1.7	.0
FEB.											
05...	1530	414	10	3.8	4.2	1.0	48	39	3.1	1.3	.1
MAR.											
05...	1500	408	7.6	3.3	3.1	1.0	47	39	2.3	1.0	.1
APR.											
04...	1330	414	7.4	3.8	3.3	1.0	45	37	4.2	1.5	.2
MAY											
06...	0845	423	8.0	3.6	3.4	.8	46	38	1.3	1.8	.0
JUNE											
05...	1500	413	6.4	3.1	2.7	.6	41	34	1.5	2.4	.0
JULY											
02...	1330	423	6.9	3.0	2.5	.7	41	34	1.7	1.1	.1
AUG.											
08...	1630	401	7.9	3.1	2.9	.8	44	36	3.2	.9	.0
SEP.											
04...	0800	427	7.6	3.1	2.9	.8	43	35	2.2	2.7	.0
30...	1000	408	7.5	2.6	3.0	.7	43	35	2.7	1.5	.1

11407000 FEATHER RIVER AT OROVILLE, CALIF.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
NOV.										
06...	.00	59	.08	133	28	0	18	.2	77	12.0
DEC.										
03...	.06	68	.09	156	34	0	18	.3	84	11.0
JAN.										
03...	.12	60	.08	138	34	0	16	.2	86	8.0
FEB.										
05...	.11	71	.10	79.4	41	1	18	.3	86	7.0
MAR.										
05...	.27	58	.08	63.9	33	0	17	.2	87	8.5
APR.										
04...	.08	46	.06	51.4	34	0	17	.2	81	10.0
MAY										
06...	.05	51	.07	58.2	35	0	17	.3	75	10.5
JUNE										
05...	.00	57	.08	63.6	29	0	17	.2	75	17.5
JULY										
02...	.03	53	.07	60.5	30	0	15	.2	69	18.5
AUG.										
08...	.35	52	.07	56.3	33	0	16	.2	75	17.5
SEP.										
04...	.05	52	.07	60.0	32	0	16	.2	--	14.0
30...	.06	49	.07	54.0	29	0	18	.2	--	13.0

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	73	82	81	87	80	81	80	76	66	73	77
2	73	73	82	82	87	80	77	80	75	68	74	77
3	72	73	82	84	88	81	77	80	73	68	74	75
4	72	74	82	84	---	80	77	80	73	68	74	75
5	72	---	84	84	82	80	80	80	73	69	74	75
6	71	73	84	84	83	80	77	---	73	69	74	73
7	71	74	84	84	84	80	77	80	---	68	74	75
8	71	74	84	81	---	80	78	---	71	68	73	75
9	73	---	84	81	82	80	77	80	71	68	73	75
10	72	74	80	82	82	80	77	81	72	---	73	76
11	75	---	80	81	82	79	74	80	70	69	---	---
12	74	75	---	81	81	79	74	81	71	70	73	76
13	74	75	80	82	81	79	75	81	70	70	73	76
14	75	75	80	82	83	79	74	80	---	70	74	76
15	75	81	80	82	82	83	74	80	70	71	---	72
16	75	81	80	91	81	83	75	---	69	71	73	---
17	75	81	80	80	79	83	75	79	69	---	---	76
18	73	81	78	81	79	83	75	79	69	71	73	73
19	73	81	78	81	79	83	---	79	69	71	76	73
20	73	81	78	81	79	83	76	79	69	72	---	73
21	73	---	78	81	80	83	---	76	71	72	77	73
22	73	81	76	83	---	83	76	76	67	72	77	74
23	73	81	76	---	80	83	76	77	67	72	77	---
24	73	81	76	83	80	82	79	76	67	72	74	74
25	73	81	76	83	80	82	79	76	67	72	74	73
26	73	81	82	83	80	82	79	76	---	72	74	74
27	70	81	81	82	80	82	79	76	68	72	74	74
28	69	81	81	83	80	82	80	76	67	73	75	74
29	69	81	81	82	---	82	80	75	68	73	77	74
30	69	81	82	83	---	82	80	75	67	73	77	74
31	73	---	81	87	---	82	---	---	---	73	77	---
MONTH	73	78	80	82	82	81	77	78	70	70	74	75

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	11.0	11.5	11.0	11.0	10.5	8.5	8.5	7.0	6.5	8.0	7.0
2	13.0	11.5	12.0	11.0	11.0	10.5	8.5	8.5	6.5	6.5	8.0	7.0
3	13.0	11.5	12.0	11.5	11.0	10.5	8.5	8.5	6.5	6.5	8.5	8.0
4	13.0	11.5	12.0	11.5	10.5	8.5	8.5	8.5	6.5	6.5	8.5	8.0
5	11.5	11.0	11.5	11.0	10.5	10.0	8.5	8.0	6.5	6.5	8.0	8.0
6	11.0	11.0	11.5	11.0	10.5	10.5	8.0	8.0	6.5	6.5	8.0	8.0
7	12.0	11.0	11.0	11.0	10.5	10.0	8.0	8.0	6.5	6.5	8.0	8.0
8	12.0	11.0	11.5	10.5	10.5	10.5	8.0	8.0	7.0	6.5	8.0	8.0
9	13.0	11.5	11.5	11.0	10.5	10.0	8.0	7.0	7.0	7.0	8.0	8.0
10	13.0	12.0	11.5	11.0	10.5	10.0	7.0	7.0	7.0	7.0	8.5	8.0
11	14.5	13.0	11.5	11.0	10.0	10.0	7.0	7.0	8.0	7.0	8.5	8.0
12	14.5	14.0	11.0	11.0	10.0	9.5	7.0	7.0	8.0	7.0	8.5	8.0
13	14.0	12.0	11.0	10.5	9.5	9.5	8.0	7.0	8.0	7.0	8.5	8.0
14	13.5	12.0	11.5	11.0	9.5	9.5	8.0	8.0	8.0	8.0	8.5	8.0
15	14.0	13.0	11.5	11.0	9.5	9.5	8.0	8.0	8.0	8.0	8.0	8.0
16	13.0	11.0	11.0	11.0	9.5	9.0	8.0	8.0	8.0	8.0	8.0	7.0
17	13.5	12.0	11.0	11.0	9.0	8.5	8.0	8.0	8.0	8.0	8.5	8.0
18	13.0	11.5	11.0	10.5	9.5	8.5	8.0	8.0	8.0	8.0	8.0	8.0
19	11.5	11.0	12.0	10.5	9.5	9.0	8.0	8.0	8.0	8.0	8.0	8.0
20	11.5	11.0	12.0	11.5	9.0	8.5	8.0	8.0	8.0	8.0	8.0	8.0
21	12.0	11.0	12.0	10.0	8.5	8.0	8.0	7.0	8.0	8.0	8.0	8.0
22	12.0	11.5	11.0	10.0	8.0	8.0	8.0	7.0	8.0	7.0	8.0	8.0
23	12.0	10.5	11.5	11.5	8.0	8.0	8.0	8.0	7.0	7.0	8.0	8.0
24	11.0	10.5	11.0	11.0	8.0	8.0	8.0	8.0	7.0	7.0	8.0	8.0
25	11.0	11.0	11.0	10.5	8.0	8.0	8.0	8.0	8.0	7.0	8.0	8.0
26	11.0	11.0	11.5	10.5	8.5	8.0	8.0	8.0	8.0	7.0	8.0	8.0
27	11.0	11.0	11.5	11.0	8.5	8.5	8.0	8.0	8.0	7.0	8.5	8.0
28	11.5	11.0	11.0	11.0	8.5	8.5	8.0	8.0	8.0	7.0	8.5	8.5
29	11.5	11.0	11.0	11.0	8.0	8.0	8.0	8.0	---	---	9.0	8.5
30	11.5	11.0	11.0	10.5	8.5	8.0	8.0	7.0	---	---	9.0	8.5
31	11.0	11.0	---	---	8.5	8.5	7.0	7.0	---	---	9.5	9.0
MONTH	14.5	10.5	12.0	10.0	11.0	8.0	8.5	7.0	8.0	6.5	9.5	7.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	8.5	10.0	9.5	13.0	12.0	14.5	13.5	17.0	15.5	15.0	14.5
2	9.5	8.5	10.0	9.5	13.0	12.0	15.0	14.5	16.0	15.5	15.0	14.5
3	9.0	8.5	9.5	8.5	13.0	12.0	15.0	15.0	16.0	15.0	14.5	13.5
4	9.0	8.5	10.0	8.5	14.5	13.0	15.0	15.0	16.5	16.0	13.5	12.0
5	8.5	8.5	10.5	10.0	14.5	13.5	15.5	14.5	16.0	16.0	13.0	12.0
6	9.5	8.5	10.5	10.0	13.5	13.5	16.0	15.0	16.0	15.0	13.0	13.0
7	9.0	8.5	10.5	10.0	13.5	13.0	16.0	15.5	15.0	14.5	13.5	13.0
8	9.0	8.5	10.5	10.0	15.0	13.5	16.0	15.5	15.5	14.5	13.5	13.0
9	8.5	8.5	10.5	10.0	15.5	14.5	16.0	15.5	16.0	15.5	13.5	13.0
10	9.0	8.5	11.0	10.0	15.0	14.5	16.0	15.5	15.5	15.5	13.5	13.0
11	10.0	8.5	10.5	9.5	14.5	14.0	16.0	15.0	16.0	15.5	13.5	12.0
12	10.0	8.5	11.0	10.5	14.5	13.5	15.0	15.0	16.0	15.5	13.0	11.5
13	10.0	8.5	11.5	11.0	15.0	13.5	15.0	15.0	16.0	15.5	12.0	12.0
14	10.0	8.5	11.0	10.5	15.0	14.5	15.5	15.0	16.0	15.5	12.0	11.5
15	10.0	8.5	11.0	10.0	15.0	14.5	15.0	15.0	16.0	15.5	13.0	11.5
16	9.5	8.5	12.0	11.0	15.0	14.5	15.5	15.0	16.0	15.5	13.0	12.0
17	9.5	8.5	12.0	11.0	14.5	14.0	16.0	15.5	16.0	15.5	13.0	12.0
18	9.5	8.5	13.0	11.0	15.0	14.5	15.5	15.0	16.0	15.0	13.0	12.0
19	10.0	8.5	12.0	11.5	14.5	14.0	15.5	15.5	16.5	15.0	13.0	11.5
20	11.0	9.0	13.5	11.5	14.5	14.0	16.0	15.5	16.5	16.0	13.0	12.0
21	11.5	9.5	13.5	11.5	14.5	14.5	16.0	15.5	16.5	15.5	14.0	12.0
22	10.5	8.5	12.0	11.5	15.0	14.0	16.0	16.0	16.5	16.0	14.0	13.0
23	8.5	8.5	12.0	11.5	15.0	14.5	16.5	16.0	16.0	15.5	14.0	13.0
24	9.0	8.5	13.0	11.5	14.5	13.0	16.5	16.0	15.5	14.0	14.0	13.0
25	9.0	8.5	13.0	12.0	15.0	13.0	16.5	16.0	15.5	15.0	13.5	12.0
26	10.0	9.0	13.5	13.0	15.0	14.5	17.0	16.5	15.5	15.5	12.0	11.0
27	10.0	9.5	13.5	12.0	15.0	15.0	16.5	16.5	15.5	14.5	12.0	11.5
28	10.0	9.5	13.5	13.0	15.0	14.5	16.5	16.0	15.5	14.5	12.0	11.5
29	10.0	10.0	14.0	13.0	15.5	14.5	16.5	16.0	15.5	14.5	12.0	11.5
30	10.5	10.0	13.5	13.0	16.0	14.0	16.5	15.5	15.0	14.5	11.5	11.5
31	---	---	13.5	12.0	---	---	17.0	16.5	15.0	14.5	---	---
MONTH	11.5	8.5	14.0	8.5	16.0	12.0	17.0	13.5	17.0	14.0	15.0	11.0

11407000 FEATHER RIVER AT OROVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	410	5	5.5	800	1	2.2	860	8	19
2	410	5	5.5	785	2	4.2	855	8	18
3	410	4	4.4	830	5	11	852	7	16
4	412	4	4.5	838	5	11	858	7	16
5	407	3	3.3	848	5	11	852	7	16
6	410	3	3.3	838	4	9.1	834	7	16
7	411	3	3.3	840	4	9.1	832	6	13
8	409	3	3.3	839	3	6.8	826	6	13
9	412	3	3.3	832	3	6.7	831	6	13
10	408	3	3.3	839	2	4.5	832	5	11
11	405	3	3.3	842	2	4.5	834	5	11
12	397	3	3.2	839	2	4.5	830	5	11
13	405	4	4.4	844	2	4.6	822	5	11
14	407	4	4.4	845	2	4.6	810	5	11
15	415	6	6.7	858	2	4.6	793	5	11
16	675	11	28	859	2	4.6	807	5	11
17	795	3	6.4	853	2	4.6	823	5	11
18	796	3	6.4	863	2	4.7	826	5	11
19	784	3	6.4	862	2	4.7	814	5	11
20	781	3	6.3	855	2	4.6	810	5	11
21	785	2	4.2	857	3	6.9	799	5	11
22	791	2	4.3	861	3	7.0	826	5	11
23	799	2	4.3	852	3	6.9	864	5	12
24	790	2	4.3	852	3	6.9	871	5	12
25	783	2	4.2	849	3	6.9	844	5	11
26	804	1	2.2	852	3	6.9	843	4	9.1
27	835	1	2.3	853	2	4.6	865	4	9.3
28	824	1	2.2	861	2	4.7	863	4	9.3
29	774	1	2.1	856	2	4.6	851	4	9.2
30	787	1	2.1	860	2	4.6	853	4	9.2
31	801	1	2.2	---	---	---	864	4	9.3
MONTH	18732	---	141.6	25362	---	181.6	25944	---	373.4

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	855	4	9.2	513	10	14	406	8	8.8
2	861	4	9.3	471	10	13	406	8	8.8
3	849	4	9.2	402	10	11	406	8	8.8
4	819	4	8.8	411	14	16	406	7	7.7
5	791	4	8.5	414	19	21	408	7	7.7
6	850	4	9.2	409	19	21	409	7	7.7
7	861	4	9.3	408	18	20	413	7	7.8
8	869	4	9.4	412	16	18	416	7	7.9
9	870	4	9.4	413	14	16	413	8	8.9
10	845	4	9.1	409	14	15	415	8	9.0
11	819	4	8.8	402	14	15	413	8	8.9
12	797	4	8.6	446	16	19	407	8	8.8
13	853	4	9.2	428	18	21	412	8	8.9
14	890	4	9.6	403	21	23	411	8	8.9
15	882	4	9.5	384	18	19	409	7	7.7
16	885	4	9.6	382	16	17	407	6	6.6
17	886	4	9.6	397	11	12	410	6	6.6
18	869	4	9.4	406	8	8.8	415	6	6.7
19	859	4	9.3	403	8	8.7	418	6	6.8
20	849	4	9.2	402	8	8.7	414	6	6.7
21	874	4	9.4	403	8	8.7	423	6	6.9
22	883	3	7.2	401	8	8.7	420	6	6.8
23	866	3	7.0	400	8	8.6	418	6	6.8
24	857	3	6.9	399	7	7.5	418	6	6.8
25	832	3	6.7	399	7	7.5	410	6	6.6
26	830	3	6.7	403	7	7.6	407	6	6.6
27	861	3	7.0	406	8	8.8	407	6	6.6
28	875	3	7.1	407	8	8.8	401	6	6.5
29	867	3	7.0	---	---	---	396	6	6.4
30	865	3	7.0	---	---	---	396	6	6.4
31	871	6	14	---	---	---	397	7	7.5
MONTH	26540	---	270.2	11533	---	383.4	12707	---	233.6

11407000 FEATHER RIVER AT OROVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	406	7	7.7	419	4	4.5	417	4	4.5
2	409	8	8.8	420	4	4.5	418	4	4.5
3	414	9	10	421	3	3.4	412	6	6.7
4	414	10	11	427	3	3.5	410	5	5.5
5	413	10	11	423	3	3.4	413	5	5.6
6	410	9	10	423	3	3.4	410	5	5.5
7	410	9	10	421	5	5.7	413	5	5.6
8	416	8	9.0	423	5	5.7	409	5	5.5
9	415	8	9.0	425	6	6.9	407	5	5.5
10	413	7	7.8	425	6	6.9	437	5	5.9
11	413	6	6.7	424	6	6.9	424	4	4.6
12	407	5	5.5	423	6	6.9	420	4	4.5
13	405	5	5.5	412	6	6.7	416	4	4.5
14	408	6	6.6	416	6	6.7	410	4	4.4
15	413	6	6.7	417	6	6.8	416	4	4.5
16	413	6	6.7	414	6	6.7	416	4	4.5
17	414	7	7.8	415	6	6.7	416	3	3.4
18	411	7	7.8	411	6	6.7	415	3	3.4
19	413	5	5.6	414	6	6.7	410	3	3.3
20	405	4	4.4	406	6	6.6	408	3	3.3
21	405	6	6.6	405	5	5.5	405	3	3.3
22	411	9	10	405	5	5.5	407	3	3.3
23	411	8	8.9	413	5	5.6	404	3	3.3
24	413	8	8.9	417	5	5.6	407	3	3.3
25	414	7	7.8	415	4	4.5	420	3	3.4
26	413	6	6.7	410	4	4.4	426	3	3.5
27	411	5	5.5	414	4	4.5	428	3	3.5
28	409	7	7.7	410	4	4.4	421	3	3.4
29	414	8	8.9	409	4	4.4	422	3	3.4
30	417	5	5.6	410	4	4.4	425	3	3.4
31	---	---	---	414	4	4.5	---	---	---
MONTH	12340	---	234.2	12901	---	168.6	12462	---	129.0

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	425	3	3.4	405	3	3.3	426	3	3.5
2	423	3	3.4	404	3	3.3	425	4	4.6
3	425	3	3.4	405	3	3.3	426	4	4.6
4	426	3	3.5	403	3	3.3	427	4	4.6
5	426	3	3.5	401	3	3.2	418	4	4.5
6	428	3	3.5	399	3	3.2	416	4	4.5
7	427	3	3.5	402	3	3.3	415	4	4.5
8	427	3	3.5	401	3	3.2	418	4	4.5
9	426	3	3.5	395	4	4.3	418	4	4.5
10	425	3	3.4	398	5	5.4	417	3	3.4
11	423	3	3.4	401	5	5.4	418	3	3.4
12	424	3	3.4	401	5	5.4	417	3	3.4
13	427	3	3.5	398	5	5.4	409	2	2.2
14	427	4	4.6	399	5	5.4	409	2	2.2
15	409	4	4.4	409	4	4.4	408	2	2.2
16	401	4	4.3	409	4	4.4	408	2	2.2
17	396	4	4.3	401	4	4.3	408	2	2.2
18	406	4	4.4	413	3	3.3	411	2	2.2
19	400	4	4.3	415	3	3.4	413	2	2.2
20	400	4	4.3	411	3	3.3	413	2	2.2
21	403	4	4.4	409	3	3.3	410	2	2.2
22	400	4	4.3	411	3	3.3	408	2	2.2
23	397	4	4.3	403	3	3.3	403	3	3.3
24	387	4	4.2	402	3	3.3	403	3	3.3
25	369	4	4.0	404	3	3.3	403	4	4.4
26	373	3	3.0	404	3	3.3	406	4	4.4
27	373	3	3.0	405	3	3.3	410	5	5.5
28	378	3	3.1	403	3	3.3	410	6	6.6
29	385	3	3.1	401	3	3.2	410	5	5.5
30	397	3	3.2	403	3	3.3	408	4	4.4
31	403	3	3.3	418	3	3.4	---	---	---
MONTH	12636	---	115.4	12533	---	116.8	12391	---	109.4
YEAR	196081		2457.2						

11407150 FEATHER RIVER NEAR GRIDLEY, CALIF.

LOCATION.--Lat 39°22'00", long 121°38'46", in Boga Fernandez Grant, T.18 N., R.3 E., Butte County, on right bank 300 ft (91 m) upstream from highway bridge, and 2.7 mi (4.3 km) east of Gridley.

DRAINAGE AREA.--3,676 mi² (9,521 km²).

PERIOD OF RECORD.--October 1964 to current year. January 1944 to September 1964 are published in reports by California Department of Water Resources.

GAGE.--Water-stage recorder. Datum of gage is 2.91 ft (0.887 m) below mean sea level. Prior to Mar. 13, 1966, water-stage recorder on left bank. Mar. 14, 1966, to Sept. 30, 1973, on right bank, at datum 47.09 ft (14.353 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 5,657 ft³/s (160.2 m³/s), 4,098,000 acre-ft/yr (5.05 km³/yr).

EXTREMES.--Current year: Maximum discharge, 11,000 ft³/s (312 m³/s) May 14 (gage height, 79.22 ft or 24.146 m); minimum daily, 1,100 ft³/s (31.2 m³/s) Apr. 12.

Period of record: Maximum discharge, 151,000 ft³/s (4,280 m³/s) Dec. 23, 1964 (gage height, 50.43 ft or 15.371 m, present datum); minimum daily, 117 ft³/s (3.31 m³/s) June 27, 1966. Maximum discharge since construction of Oroville Dam in 1967, 72,900 ft³/s (2,060 m³/s) Jan. 27, 1970 (gage height, 42.81 ft or 13.048 m); minimum daily, 366 ft³/s (10.4 m³/s) July 26, 1968.

Flood of Dec. 23, 1955, reached a stage of 52.25 ft (15.926 m), present datum, discharge unknown.

REMARKS.--Flow regulated by Lake Oroville since November 1967 (see sta 11406800) and Thermalito Afterbay release to the Feather River since December 1968 (see sta 11406920). See schematic diagram showing diversions and storage from Feather River at Lake Oroville.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7710	3530	10100	3510	2830	1720	1600	8040	3640	2500	5720	4340
2	7670	3530	10100	3530	2540	1710	1460	8870	3660	2500	5210	4380
3	7720	3520	10100	3510	2180	1680	1320	10200	3610	2510	5440	4340
4	7690	3540	10100	3440	2000	1680	1180	10300	4130	2510	5360	4340
5	7520	3570	10000	3460	1780	1700	1140	10300	6240	2510	5340	4320
6	7550	3570	10000	3480	1710	1720	1130	10300	8100	2520	5350	4300
7	7570	3590	9960	3530	1710	1840	1130	10300	9130	2520	5150	4250
8	7630	3530	9990	3550	1750	1850	1130	10300	9220	2530	5140	4300
9	7580	3520	9580	3510	1810	1840	1120	10500	9140	2540	5120	4340
10	7570	3490	7720	3490	1800	1810	1130	10600	9170	2540	4420	4340
11	7550	3510	5870	3420	1760	1740	1120	10500	8290	3680	4330	4320
12	7460	3520	5100	3400	1870	1740	1100	10600	7160	4880	4340	4310
13	7400	4000	4850	3420	2170	1770	1130	10800	6140	5910	4350	4310
14	7470	6800	3680	3550	1970	1750	1140	10800	4970	6060	4310	4260
15	7470	7450	3490	3500	1850	1790	1130	10700	4300	6010	4340	4250
16	7450	7460	3480	3400	1760	1790	1120	10700	4200	6040	4350	4210
17	7400	7450	3540	3140	1730	1810	1120	9700	3130	5920	4340	4190
18	7360	7550	3560	3040	1750	1820	1130	8580	2640	5860	4370	4170
19	7250	7580	3500	2970	1770	1790	1130	8440	2590	5830	4400	4210
20	7210	7580	3490	2960	1710	1790	1120	7640	2590	5880	4400	3560
21	7260	8940	3490	2990	1690	1880	1500	6250	2570	5890	4390	2770
22	7310	10000	3420	3000	1700	1900	2000	5920	2510	5930	4380	2680
23	6940	10000	3440	2990	1690	1860	2440	4970	2520	5920	4360	2660
24	5260	10100	3530	2930	1680	1880	3200	4040	2500	5930	4330	2660
25	3740	10100	3480	2890	1670	1840	4290	3650	2500	5940	4340	2660
26	3570	10100	3480	2870	1670	1790	5440	3650	2510	5900	4350	2660
27	3560	10100	3570	2890	1680	1790	6490	3650	2520	5860	4400	2640
28	3630	10100	3550	2960	1690	1760	7640	3630	2520	5830	4350	2660
29	3540	10200	3490	2910	---	1740	7920	3620	2510	5880	4310	2660
30	3530	10200	3490	2890	---	1750	8020	3650	2490	5850	4320	2680
31	3560	---	3520	3020	---	1700	---	3640	---	5810	4320	---
TOTAL	202130	198100	176670	100150	51920	55230	72520	244840	137200	145990	143630	111770
MEAN	6520	6603	5699	3231	1854	1782	2417	7898	4573	4709	4633	3726
MAX	7720	10200	10100	3550	2830	1900	8020	10800	9220	6060	5720	4380
MIN	3530	3490	3420	2870	1670	1680	1100	3620	2490	2500	4310	2640
AC-FT	400900	392900	350400	198600	103000	109500	143800	485600	272100	289600	284900	221700

CAL YR 1974 TOTAL 3580120 MEAN 9809 MAX 54000 MIN 2580 AC-FT 7101000
WTR YR 1975 TOTAL 1640150 MEAN 4494 MAX 10800 MIN 1100 AC-FT 3253000

11407150 FEATHER RIVER NEAR GRIDLEY, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: October 1964 to current year.
Sediment records: October 1964 to current year.

EXTREMES.--Current year:
Water temperatures, Maximum, 25.0°C July 7; minimum, 6.0°C Jan. 31, Feb. 1.
Sediment concentrations: Maximum daily, 46 mg/l June 9; minimum daily, 3 mg/l Aug. 30, 31.
Sediment discharge: Maximum daily, 1,160 tons (1,050 tonnes) May 3; minimum daily, 21 tons (19 tonnes) Apr. 11, 12, 18.
Period of record:
Water temperatures (1964-69, 1970 to current year): Maximum (1972 to current year), 25.0°C July 7, 1975; minimum, 4.0°C on several days in December and January of most years.
Sediment concentrations: Maximum daily, 1,340 mg/l Dec. 25, 1964; minimum daily, 1 mg/l Dec. 12, 1968, Dec. 4, 1969, Sept. 1, 1970, Dec. 14, 1971.
Sediment discharge: Maximum daily, 527,000 tons (478,000 tonnes) Dec. 23, 1964; minimum daily, 1.4 tons (1.3 tonnes) Oct. 27, 1966.

REMARKS.--Temperature records furnished by California Department of Water Resources. Where no maximum or minimum is shown, temperature is once-daily reading.

REVISIONS.--WRD Calif. 1973: 1966, sediment; WRD Calif. 1974: 1965, 1970, 1971, 1973, sediment.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT			NOV			DEC			JAN			FEB			MAR		
	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN
1	16.0	--	15.5	14.0	--	13.0	11.0	--	10.5	7.0	--	6.5	7.0	--	6.0	11.0	--	10.0
2	15.5	--	14.5	13.5	--	12.0	11.0	--	11.0	7.0	--	6.5	8.0	--	7.0	12.0	--	10.0
3	15.0	--	14.5	13.5	--	12.0	11.0	--	11.0	7.0	--	6.5	8.5	--	7.0	13.0	--	10.5
4	15.0	--	14.5	13.5	--	12.0	11.0	--	11.0	7.0	--	6.5	9.0	--	8.0	12.0	--	11.0
5	15.0	--	14.5	13.5	--	12.0	11.0	--	11.0	7.0	--	7.0	8.5	--	8.0	12.0	--	11.0
6	15.0	--	14.0	13.5	--	12.0	11.0	--	10.5	7.0	--	7.0	8.5	--	8.0	12.0	--	11.0
7	15.0	--	14.0	13.0	--	12.0	10.5	--	10.0	8.0	--	7.0	9.0	--	8.5	12.0	--	11.0
8	14.5	--	14.0	13.0	--	11.5	10.5	--	10.0	8.5	--	8.0	10.0	--	8.5	13.0	--	11.5
9	14.5	--	13.5	13.0	--	11.5	10.5	--	10.0	8.0	--	8.0	10.0	--	9.5	13.0	--	11.0
10	14.5	--	13.5	13.0	--	11.5	10.0	--	10.0	8.0	--	8.0	10.5	--	9.5	13.0	--	11.0
11	15.0	--	13.5	13.0	--	12.0	10.0	--	10.0	8.0	--	7.0	10.5	--	9.5	13.5	--	11.5
12	15.0	--	14.0	13.0	--	12.0	10.0	--	10.0	8.5	--	7.0	10.0	--	10.0	13.5	--	11.5
13	15.5	--	14.5	13.0	--	12.0	10.0	--	10.0	8.0	--	7.0	10.5	--	10.0	12.0	--	11.0
14	15.5	--	14.5	13.0	--	12.0	10.0	--	10.0	8.5	--	7.0	11.0	--	10.0	13.0	--	10.5
15	16.0	--	15.0	12.0	--	11.5	10.5	--	10.0	8.0	--	8.0	10.5	--	9.0	11.5	--	11.0
16	15.5	--	14.5	11.5	--	11.5	10.0	--	10.0	8.5	--	8.0	10.0	--	9.0	12.0	--	10.5
17	15.0	--	14.5	11.5	--	11.5	10.5	--	10.0	8.0	--	8.0	10.0	--	8.5	11.0	--	10.5
18	15.0	--	14.5	12.0	--	11.5	10.0	--	9.5	8.0	--	8.0	10.0	--	9.0	11.5	--	10.0
19	14.5	--	14.0	11.5	--	11.0	9.5	--	9.5	8.0	--	8.0	9.5	--	9.0	11.5	--	11.0
20	15.0	--	14.0	11.5	--	11.0	9.5	--	9.5	8.5	--	8.0	10.0	--	9.0	13.0	--	10.5
21	14.5	--	13.5	11.5	--	11.0	9.5	--	9.0	8.5	--	8.0	10.0	--	8.5	11.5	--	10.0
22	14.0	--	13.0	12.0	--	11.5	9.0	--	8.5	8.5	--	8.0	10.0	--	8.0	11.0	--	9.5
23	13.5	--	12.0	11.5	--	11.0	8.5	--	7.0	8.5	--	8.0	10.0	--	8.5	11.5	--	10.0
24	13.5	--	13.0	11.0	--	10.5	8.0	--	7.0	9.0	--	8.0	10.5	--	9.0	11.0	--	10.5
25	13.5	--	13.0	11.5	--	11.0	8.0	--	6.5	9.0	--	8.5	11.0	--	9.0	12.0	--	10.5
26	14.0	--	13.0	11.5	--	11.0	8.0	--	6.5	9.0	--	8.5	11.0	--	9.5	11.5	--	10.0
27	13.5	--	13.0	11.5	--	11.0	8.0	--	7.0	8.0	--	7.0	12.0	--	10.0	12.0	--	10.0
28	14.5	--	13.0	11.0	--	11.0	8.0	--	7.0	7.0	--	6.5	12.0	--	10.5	11.5	--	9.5
29	14.0	--	13.0	11.0	--	10.5	7.0	--	6.5	8.0	--	6.5	--	--	--	12.0	--	9.5
30	14.0	--	13.0	11.0	--	11.0	8.0	--	6.5	7.0	--	6.5	--	--	--	13.5	--	10.5
31	13.5	--	13.5	--	--	--	7.0	--	6.5	6.5	--	6.0	--	--	--	13.5	--	11.0
MONTH	16.0	--	12.0	14.0	--	10.5	11.0	--	6.5	9.0	--	6.0	12.0	--	6.0	13.5	--	9.5

11407150 FEATHER RIVER NEAR GRIDLEY, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	APR			MAY			JUN			JUL			AUG			SEP		
	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN
1	13.5	--	11.0	13.5	--	11.5	20.5	--	18.0	21.0	--	18.0	21.0	--	20.0	20.5	--	18.5
2	13.5	--	11.0	13.5	--	12.0	20.0	--	18.0	21.0	--	18.5	21.5	--	19.5	20.0	--	19.0
3	13.0	--	11.0	12.0	--	11.0	20.5	--	18.0	20.5	--	18.0	22.0	--	20.0	20.5	--	18.0
4	12.0	--	11.0	11.5	--	10.5	20.0	--	18.0	21.0	--	18.5	22.0	--	20.0	20.5	--	18.5
5	12.0	--	10.5	11.5	--	10.0	19.5	--	18.0	21.5	--	19.0	21.5	--	19.5	20.5	--	18.5
6	13.0	--	11.0	13.0	--	11.0	19.0	--	17.0	23.0	--	19.5	20.5	--	19.0	20.5	--	18.5
7	12.0	--	11.0	13.5	--	11.5	19.0	--	17.0	25.0	--	20.5	21.0	--	19.0	20.5	--	18.0
8	12.0	--	11.0	13.5	--	11.5	18.0	--	16.5	24.5	--	20.5	21.5	--	19.5	20.0	--	18.5
9	14.5	--	11.0	13.5	--	11.5	18.0	--	16.0	--	--	--	21.5	--	19.5	20.0	--	18.5
10	14.5	--	12.0	13.5	--	12.0	18.5	--	17.0	--	--	--	22.0	--	19.5	18.5	--	16.5
11	15.0	--	12.0	14.5	--	12.0	18.5	--	17.0	--	23.0	--	21.5	--	19.5	18.5	--	16.5
12	16.0	--	13.5	14.0	--	13.0	19.0	--	17.0	--	--	--	21.0	--	19.5	18.5	--	16.5
13	16.0	--	14.0	14.5	--	13.0	19.0	--	17.0	--	21.0	--	21.0	--	19.0	18.5	--	16.5
14	15.0	--	13.5	14.5	--	13.5	19.0	--	17.0	--	--	--	20.5	--	19.0	19.0	--	16.5
15	14.5	--	13.0	14.0	--	13.0	20.0	--	17.0	--	19.0	--	21.0	--	19.0	18.5	--	16.5
16	15.0	--	13.0	14.0	--	12.0	21.0	--	18.5	--	--	--	21.0	--	19.0	18.5	--	16.5
17	15.5	--	13.5	15.0	--	13.5	21.5	--	19.0	--	21.0	--	20.5	--	19.0	--	19.5	--
18	15.5	--	13.5	15.5	--	14.0	21.5	--	19.5	--	--	--	20.5	--	19.5	--	--	--
19	16.0	--	14.0	15.5	--	14.5	20.5	--	18.5	--	20.0	--	20.5	--	19.0	--	--	--
20	17.0	--	14.5	14.5	--	13.5	21.0	--	18.5	--	--	--	21.0	--	19.5	--	--	--
21	18.0	--	15.0	15.0	--	13.5	21.0	--	18.5	--	19.5	--	20.5	--	19.0	--	20.0	--
22	16.0	--	14.5	16.0	--	14.0	21.5	--	19.0	--	--	--	21.5	--	19.0	--	--	--
23	15.5	--	14.0	18.0	--	15.5	21.0	--	18.5	--	22.0	--	21.0	--	19.5	--	--	--
24	14.5	--	13.5	19.0	--	16.0	20.0	--	18.0	--	--	--	22.0	--	19.5	--	--	--
25	14.5	--	13.0	19.0	--	16.5	20.5	--	18.0	--	21.0	--	22.0	--	20.0	20.5	--	18.5
26	14.0	--	12.0	19.5	--	16.5	21.0	--	18.5	--	--	--	21.0	--	19.5	20.0	--	18.5
27	13.5	--	12.0	20.0	--	17.0	21.0	--	18.5	--	20.5	--	20.0	--	19.0	19.5	--	18.0
28	13.0	--	11.5	20.0	--	18.0	21.0	--	18.5	--	--	--	20.5	--	18.5	19.0	--	17.0
29	13.5	--	11.5	20.0	--	18.0	21.0	--	19.0	--	19.0	--	20.5	--	18.5	19.0	--	17.0
30	13.5	--	11.5	20.5	--	18.0	21.0	--	18.0	--	--	--	20.5	--	19.0	19.0	--	17.0
31	--	--	--	21.0	--	18.5	--	--	--	--	--	--	20.5	--	19.0	--	--	--
MONTH	18.0	--	10.5	21.0	--	10.0	21.5	--	16.0	--	--	--	22.0	--	18.5	--	--	--

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	7710	14	291	3530	21	200	10100	12	327
2	7670	18	373	3500	16	151	10100	12	327
3	7720	22	459	3520	20	190	10100	12	327
4	7690	23	478	3540	27	258	10100	14	382
5	7520	25	508	3570	22	212	10000	16	432
6	7550	19	387	3570	18	174	10000	16	432
7	7570	16	327	3590	16	155	9960	18	484
8	7630	16	330	3530	16	152	9990	20	539
9	7580	17	348	3520	20	190	9580	20	517
10	7570	17	347	3490	24	226	7720	15	313
11	7550	16	326	3510	22	208	5870	13	206
12	7460	16	322	3520	15	143	5100	19	262
13	7400	16	320	4000	8	86	4850	30	393
14	7470	16	323	6800	16	294	3680	18	179
15	7470	16	323	7450	10	201	3490	10	94
16	7450	17	342	7460	10	201	3480	9	85
17	7400	18	360	7450	9	181	3540	9	86
18	7360	21	417	7550	9	183	3560	9	87
19	7250	23	450	7580	9	184	3500	8	76
20	7210	23	448	7580	10	205	3490	8	75
21	7260	23	451	8940	12	290	3490	8	75
22	7310	23	454	10000	12	324	3420	8	74
23	6940	25	468	10000	14	378	3440	8	74
24	5260	22	312	10100	12	327	3530	8	76
25	3740	20	202	10100	12	327	3480	8	75
26	3570	18	174	10100	12	327	3480	8	75
27	3560	18	173	10100	12	327	3570	8	77
28	3630	18	176	10100	12	327	3550	8	77
29	3540	18	172	10200	14	386	3490	8	75
30	3530	22	210	10200	14	386	3490	8	75
31	3560	27	260	---	---	---	3520	8	76
MONTH	202130	---	10531	198100	---	7193	176670	---	6452

11407150 FEATHER RIVER NEAR GRIDLEY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3510	8	76	2830	12	92	1720	15	70
2	3530	8	76	2540	15	103	1710	14	65
3	3510	8	76	2180	18	106	1680	12	54
4	3440	8	74	2000	20	108	1680	11	50
5	3460	8	75	1780	18	87	1700	12	55
6	3480	8	75	1710	18	83	1720	12	56
7	3530	8	76	1710	16	74	1840	12	60
8	3550	12	115	1750	16	76	1850	14	70
9	3510	8	76	1810	16	78	1840	15	75
10	3490	8	75	1800	15	73	1810	12	59
11	3420	8	74	1760	15	71	1740	12	56
12	3400	8	73	1870	18	91	1740	11	52
13	3420	8	74	2170	18	105	1770	10	48
14	3550	9	86	1970	16	85	1750	10	47
15	3500	9	85	1850	14	70	1790	10	48
16	3400	9	83	1760	14	67	1790	11	53
17	3140	9	76	1730	15	70	1810	11	54
18	3040	9	74	1750	16	76	1820	11	54
19	2970	8	64	1770	18	86	1790	11	53
20	2960	8	64	1710	18	83	1790	11	53
21	2990	8	65	1690	18	82	1880	11	56
22	3000	9	73	1700	18	83	1900	12	62
23	2990	9	73	1690	15	68	1860	12	60
24	2930	9	71	1680	14	64	1880	14	71
25	2890	9	70	1670	14	63	1840	15	75
26	2870	10	77	1670	12	54	1790	15	72
27	2890	12	94	1680	12	54	1790	14	68
28	2960	12	96	1690	12	55	1760	12	57
29	2910	10	79	---	---	---	1740	12	56
30	2890	10	78	---	---	---	1750	10	47
31	3020	10	82	---	---	---	1700	8	37
MONTH	100150	---	2405	51920	---	2207	55230	---	1793

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1600	13	56	8040	28	608	3640	22	216
2	1460	12	47	8870	27	647	3660	27	267
3	1320	12	43	10200	42	1160	3610	33	322
4	1180	8	25	10300	26	723	4130	37	413
5	1140	8	25	10300	24	667	6240	38	640
6	1130	8	24	10300	20	556	8100	28	612
7	1130	8	24	10300	18	501	9130	32	789
8	1130	8	24	10300	18	501	9220	38	946
9	1120	8	24	10500	18	510	9140	46	1140
10	1130	8	24	10600	20	572	9170	40	990
11	1120	7	21	10500	24	680	8290	32	716
12	1100	7	21	10600	30	859	7160	26	503
13	1130	9	27	10800	24	700	6140	23	381
14	1140	11	34	10800	22	642	4970	22	295
15	1130	10	31	10700	20	578	4300	20	232
16	1120	9	27	10700	16	462	4200	17	193
17	1120	8	24	9700	14	367	3130	17	144
18	1130	7	21	8580	13	301	2640	14	100
19	1130	9	27	8440	14	319	2590	13	91
20	1120	12	36	7640	14	289	2590	12	84
21	1500	15	61	6250	12	202	2570	10	69
22	2000	19	103	5920	10	160	2510	13	88
23	2440	25	165	4970	10	134	2520	17	116
24	3200	28	242	4040	9	98	2500	13	88
25	4290	32	371	3650	14	138	2500	12	81
26	5440	36	529	3650	21	207	2510	10	68
27	6490	29	508	3650	21	207	2520	9	61
28	7640	33	681	3630	21	206	2520	9	61
29	7920	36	770	3620	16	156	2510	9	61
30	8020	29	628	3650	15	148	2490	10	67
31	---	---	---	3640	18	177	---	---	---
MONTH	72520	---	4643	244840	---	13475	137200	---	9834

11407150 FEATHER RIVER NEAR GRIDLEY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2500	12	81	5720	13	201	4340	6	70
2	2500	10	67	5210	13	183	4380	9	106
3	2510	10	68	5440	11	162	4340	9	105
4	2510	12	81	5360	9	130	4340	9	105
5	2510	13	88	5340	9	130	4320	10	117
6	2520	14	95	5350	9	130	4300	10	116
7	2520	12	82	5150	9	125	4250	10	115
8	2530	9	61	5140	9	125	4300	10	116
9	2540	10	69	5120	14	194	4340	12	141
10	2540	12	82	4420	18	215	4340	12	141
11	3680	14	139	4330	21	246	4320	10	117
12	4880	16	211	4340	18	211	4310	10	116
13	5910	19	303	4350	14	164	4310	9	105
14	6060	22	360	4310	9	105	4260	9	104
15	6010	27	438	4340	8	94	4250	8	92
16	6040	22	359	4350	9	106	4210	8	91
17	5920	18	288	4340	12	141	4190	8	91
18	5860	19	301	4370	10	118	4170	8	90
19	5830	19	299	4400	9	107	4210	8	91
20	5880	16	254	4400	9	107	3560	9	87
21	5890	14	223	4390	10	119	2770	8	60
22	5930	13	208	4380	12	142	2680	8	58
23	5920	13	208	4360	14	165	2660	10	72
24	5930	13	208	4330	10	117	2660	10	72
25	5940	14	225	4340	8	94	2660	10	72
26	5900	14	223	4350	6	70	2660	11	79
27	5860	16	253	4400	4	48	2640	13	93
28	5830	16	252	4350	6	70	2660	14	101
29	5880	16	254	4310	4	47	2660	14	101
30	5850	14	221	4320	3	35	2680	14	101
31	5810	14	220	4320	3	35	---	---	---
MONTH	145990	---	6221	143630	---	3936	111770	---	2925
YEAR	1640150		71615.0						

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
JAN. 25...	1410	8.5	2890	6	47	88	100
FEB. 27...	0900	10.0	1680	10	45	100	--

11407300 NORTH HONCUT CREEK NEAR BANGOR, CALIF.

LOCATION.--Lat 39°20'32", long 121°29'25", in NW¼SE¼ sec.11, T.17 N., R.4 E., Butte County, on left bank 0.2 mi (0.3 km) upstream from unnamed tributary, and 5.7 mi (9.2 km) southwest of Bangor.

DRAINAGE AREA.--47.1 mi^2 (122.0 km^2).

PERIOD OF RECORD.--October 1960 to September 1962, July 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 125 ft (38 m), from topographic map. Prior to September 1962, at site 50 ft (15 m) upstream at same datum.

AVERAGE DISCHARGE.--14 years, 52.7 ft^3/s (1.492 m^3/s), 38,180 acre-ft/yr (47.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 7,340 ft^3/s (208 m^3/s) Feb. 12 (gage height, 11.09 ft or 3.380 m); minimum daily, 0.10 ft^3/s (0.003 m^3/s) July 29, 30.

Period of record: Maximum discharge, 10,700 ft^3/s (303 m^3/s) Dec. 26, 1964 (gage height, 11.57 ft or 3.527 m), from rating curve extended above 4,600 ft^3/s (130 m^3/s); maximum gage height, 12.03 ft (3.667 m) Feb. 27, 1973; no flow many days in most years.

REMARKS.--Small diversions above station for irrigation. Slight regulation occurs from Lake Wyandotte, capacity, 1,460 acre-ft (1.80 hm^3).

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	6.1	4.2	7.7	1110	20	42	12	3.3	1.2	.30	1.4
2	.40	4.2	4.4	6.8	1540	32	35	10	3.6	1.2	.40	1.3
3	.50	3.0	7.0	6.2	337	27	32	9.3	3.4	1.8	.90	1.3
4	.50	2.6	15	5.9	533	22	33	14	2.9	2.3	.80	1.0
5	.40	2.1	10	5.9	179	22	67	11	2.6	2.8	.80	.80
6	.30	2.0	7.4	77	138	32	70	10	3.2	2.5	.70	.90
7	.40	2.5	6.2	127	163	233	57	10	2.6	2.1	.60	.90
8	.30	6.8	5.6	128	545	418	81	8.8	2.5	1.9	.40	.80
9	.40	5.5	5.2	41	435	172	63	8.5	2.0	1.7	.60	1.3
10	.80	3.9	5.1	22	384	130	45	8.0	2.0	1.7	.90	1.7
11	1.2	3.2	4.6	17	156	90	36	7.7	1.7	1.6	1.1	2.5
12	.90	2.8	4.6	14	1870	59	30	7.0	1.7	1.4	1.2	2.2
13	.90	2.5	4.9	15	2370	83	26	6.5	1.7	1.4	1.3	1.7
14	.90	2.3	4.9	17	359	128	25	5.9	1.7	1.2	1.6	1.4
15	.80	2.3	4.8	17	192	77	24	5.2	1.8	1.1	1.6	1.1
16	.70	2.2	4.7	16	125	187	21	6.5	1.8	1.2	1.5	1.0
17	.70	2.0	4.6	15	86	109	19	6.6	1.9	1.1	1.6	1.2
18	.60	2.5	4.5	15	65	195	17	6.0	2.0	.90	2.5	1.5
19	.70	3.5	4.4	14	95	453	15	7.0	2.4	.70	3.3	1.9
20	.80	3.3	4.4	13	104	274	14	7.0	3.0	1.3	2.7	2.5
21	1.0	3.8	4.6	11	59	429	14	7.2	2.3	1.6	2.4	2.1
22	1.4	5.3	4.5	11	44	467	13	8.1	2.1	1.5	2.0	1.5
23	1.8	4.6	4.1	10	37	196	12	7.0	1.8	1.4	1.6	1.2
24	2.7	4.3	3.9	11	32	339	31	6.9	2.0	.90	1.2	1.4
25	2.8	4.4	3.8	11	30	670	68	5.1	2.2	.60	1.0	1.5
26	2.8	4.5	3.9	11	27	232	31	4.6	1.9	.50	1.0	1.7
27	2.7	4.2	4.9	10	24	150	23	4.4	1.6	.30	1.2	1.7
28	5.4	4.2	45	8.7	22	102	18	4.2	1.8	.20	1.3	1.7
29	6.1	4.0	27	8.1	---	77	16	3.9	1.7	.10	1.5	1.5
30	4.6	4.1	13	6.4	---	63	14	3.9	1.5	.10	2.3	1.4
31	4.8	---	9.5	7.2	---	53	---	3.6	---	.50	1.8	---
TOTAL	48.80	108.7	240.7	685.9	11061	5541	992	225.9	66.7	38.80	42.10	44.10
MEAN	1.57	3.62	7.76	22.1	395	179	33.1	7.29	2.22	1.25	1.36	1.47
MAX	6.1	6.8	45	128	2370	670	81	14	3.6	2.8	3.3	2.5
MIN	.30	2.0	3.8	5.9	22	20	12	3.6	1.5	.10	.30	.80
AC-FT	97	216	477	1360	21940	10990	1970	448	132	77	84	87

CAL YR 1974 TOTAL 19723.90 MEAN 54.0 MAX 1930 MIN 0 AC-FT 39120
WTR YR 1975 TOTAL 19095.70 MEAN 52.3 MAX 2370 MIN .10 AC-FT 37880

11407500 SOUTH HONCUT CREEK NEAR BANGOR, CALIF.

LOCATION.--Lat 39°22'04", long 121°22'16", in SE¼SE¼ sec.35, T.18 N., R.5 E., Butte County, on right bank 2.3 mi (3.7 km) southeast of Bangor, 3.3 mi (5.3 km) upstream from Tennessee Creek, and 16.3 mi (26.2 km) southeast of Oroville.

DRAINAGE AREA.--30.6 mi² (79.3 km²).

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 620 ft (189 m), from topographic map.

AVERAGE DISCHARGE.--25 years, 37.4 ft³/s (1.059 m³/s), 27,100 acre-ft/yr (33.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,910 ft³/s (111 m³/s) Feb. 1 (gage height, 9.38 ft or 2.859 m); minimum daily, 0.16 ft³/s (0.005 m³/s) July 29.

Period of record: Maximum discharge, 17,600 ft³/s (498 m³/s) Dec. 26, 1964 (gage height, 19.25 ft or 5.867 m), from rating curve extended above 2,200 ft³/s (62.3 m³/s) on basis of slope-area measurements at gage heights 11.15 ft (3.399 m) and 19.25 ft (5.867 m); no flow at times in most years.

REMARKS.--Records good. Some small diversions upstream for irrigation.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.54	3.6	4.1	4.5	931	19	43	18	3.7	1.2	.35	2.3
2	.56	2.5	3.9	4.1	889	26	37	17	3.8	1.5	.69	2.3
3	.94	1.9	12	3.9	228	20	38	24	3.8	1.3	.85	2.3
4	1.2	1.7	21	4.4	479	18	48	24	3.4	1.3	.77	2.2
5	1.1	1.8	7.2	4.6	115	19	74	19	3.0	1.8	1.0	2.0
6	.79	2.0	6.2	147	78	23	65	17	2.9	1.1	.90	1.8
7	.60	3.0	4.6	92	79	169	57	17	2.8	.89	.83	1.7
8	.48	6.0	3.6	145	282	302	67	16	2.7	.82	.84	1.5
9	.89	3.4	3.3	26	307	117	52	16	3.2	.77	.88	1.8
10	1.2	2.7	3.1	16	202	90	43	16	1.9	.63	.96	2.3
11	.89	2.3	3.1	11	85	66	38	15	2.0	.58	.65	2.9
12	1.9	2.1	3.1	8.4	877	48	33	13	2.3	.51	.70	2.8
13	2.5	2.1	3.4	7.2	1,180	55	38	12	2.5	.54	2.7	2.7
14	1.4	2.2	3.2	6.4	213	56	31	11	2.3	.43	1.9	2.4
15	.80	2.2	3.1	5.7	110	49	30	11	1.9	.51	2.1	2.3
16	.71	2.3	3.0	5.2	73	109	26	11	1.6	1.4	2.1	2.5
17	1.1	2.5	2.9	4.8	53	67	25	10	1.7	1.4	2.2	2.5
18	1.2	3.0	2.7	4.0	42	125	23	9.1	1.8	.59	3.0	2.4
19	1.1	3.4	2.8	3.6	82	347	21	8.6	2.2	.47	3.5	2.2
20	1.3	3.0	2.9	3.4	67	154	20	8.8	2.3	.82	3.2	2.2
21	1.2	5.1	3.1	3.4	41	294	19	8.3	2.3	.70	2.9	2.2
22	1.1	6.6	3.2	3.3	33	251	18	7.2	2.1	.69	2.7	2.2
23	1.1	3.8	3.1	3.3	28	126	19	6.6	1.9	.70	2.4	2.4
24	1.1	3.3	2.9	3.2	25	288	69	6.6	2.0	.70	2.3	2.5
25	1.2	5.5	3.0	3.2	23	595	56	5.9	2.2	.49	2.1	2.6
26	1.0	5.1	3.1	3.2	21	169	31	5.5	1.8	.32	2.1	2.7
27	1.1	4.3	14	3.2	20	115	25	5.2	1.7	.29	2.7	2.3
28	3.4	3.5	58	3.1	18	88	22	4.8	1.6	.18	2.7	2.1
29	2.4	3.3	14	3.2	------	71	21	4.4	1.6	.16	2.6	2.0
30	1.6	4.9	9.2	3.2	------	59	19	4.0	1.4	.19	2.5	2.2
31	3.0	------	6.7	4.5	------	51	------	3.6	------	.20	2.4	------
TOTAL	39.40	99.1	219.5	544.0	6,581	3,986	1,100	355.6	70.4	23.18	57.52	68.3
MEAN	1.27	3.30	7.08	17.5	235	129	36.7	11.5	2.35	.75	1.86	2.28
MAX	3.4	6.6	58	147	1,180	595	74	24	3.8	1.8	3.5	2.9
MIN	.48	1.7	2.7	3.1	18	18	18	3.6	1.4	.16	.35	1.5
AC-FT	78	197	435	1,080	13,050	7,910	2,180	705	140	46	114	135

CAL YR 1974 TOTAL 17,246.57 MEAN 47.3 MAX 1,670 MIN .42 AC-FT 34,210
WTR YR 1975 TOTAL 13,144.00 MEAN 36.0 MAX 1,180 MIN .16 AC-FT 26,070

Peak discharge (base, 1,400 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-1	2000	9.38	3,910	2-12	1930	8.87	3,260
2-4	0130	7.14	1,410	3-25	0300	7.43	1,670

11407700 FEATHER RIVER AT YUBA CITY, CALIF.

LOCATION.--Lat 39°08'20", long 121°36'17", in New Helvetia Grant, T.15 N., R.3 E., Yuba County, on left bank at 5th Street railroad bridge in Yuba City, 0.7 mi (1.1 km) upstream from confluence with Yuba River, and at mile 28.0 (45.1 km) upstream from mouth.

DRAINAGE AREA.--3,974 mi^2 (10,293 km^2).

PERIOD OF RECORD.--October 1964 to current year. November 1943 to September 1963 (prior to July 1, 1944, stage only) published in reports of California Department of Water Resources.

GAGE.--Water-stage recorder. Datum of gage is 3.00 ft (0.914 m) below mean sea level.

AVERAGE DISCHARGE.--11 years, 6,010 ft^3/s (170.2 m^3/s), 4,354,000 acre-ft/yr (5.37 km^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 15,800 ft^3/s (447 m^3/s) Feb. 13; minimum daily, 1,250 ft^3/s (35.4 m^3/s) Apr. 20.

Period of record: Maximum discharge, 172,000 ft^3/s (4,870 m^3/s) Dec. 23, 1964 (gage height, 76.42 ft or 23.293 m); minimum daily, 166 ft^3/s (4.70 m^3/s) June 30, 1966.

REMARKS.--Flow regulated by powerplants and reservoirs. There are many diversions above the station for irrigation. Discharge figures computed as summation of Feather River near Gridley, North and South Honcut Creeks (see sta 11407150, 11407300, 11407500), and a correction for ungaged drainage area.

COOPERATION.--Gage-height record furnished by California Department of Water Resources.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7710	3570	10100	3560	10700	1870	1930	8160	3670	2510	5720	4350
2	7670	3530	10100	3570	11900	1930	1740	8970	3690	2510	5210	4390
3	7730	3540	10200	3550	4350	1860	1590	10300	3640	2520	5450	4350
4	7700	3560	10200	3480	5880	1830	1490	10400	4150	2520	5370	4350
5	7530	3580	10100	3500	2910	1860	1680	10400	6260	2520	5350	4330
6	7550	3590	10100	4340	2540	1930	1650	10400	8120	2530	5360	4310
7	7570	3610	10000	4370	2640	3380	1570	10400	9150	2520	5160	4260
8	7630	3580	10000	4600	4930	4610	1700	10400	9240	2540	5140	4310
9	7580	3550	9610	3770	4660	2950	1560	10600	9160	2550	5130	4350
10	7580	3520	7750	3640	4050	2650	1470	10700	9180	2550	4430	4360
11	7560	3530	5900	3530	2690	2340	1400	10600	8300	3690	4340	4340
12	7470	3540	5130	3480	12400	2150	1340	10700	7180	4890	4350	4330
13	7410	4020	4880	3500	15800	2300	1350	10900	6160	5920	4370	4330
14	7480	6820	3710	3640	4170	2460	1360	10900	4990	6070	4320	4270
15	7480	7470	3520	3590	3010	2270	1340	10800	4310	6020	4350	4260
16	7460	7480	3510	3480	2520	2930	1300	10800	4210	6050	4360	4220
17	7410	7470	3570	3220	2260	2490	1290	9770	3140	5930	4350	4200
18	7370	7570	3590	3110	2160	3050	1280	8640	2650	5870	4390	4180
19	7260	7610	3530	3040	2450	4860	1270	8500	2610	5830	4430	4230
20	7220	7600	3520	3020	2370	3430	1250	7700	2610	5890	4420	3580
21	7270	8970	3520	3040	2070	4660	1630	6310	2590	5900	4410	2790
22	7320	10000	3450	3050	2000	4660	2120	5980	2530	5940	4400	2690
23	6950	10000	3470	3040	1940	3100	2560	5020	2530	5930	4380	2670
24	5270	10100	3560	2980	1900	4290	3580	4090	2520	5940	4340	2670
25	3760	10100	3510	2940	1870	6720	4770	3690	2520	5940	4350	2680
26	3580	10100	3510	2920	1850	3330	5680	3690	2520	5900	4360	2680
27	3570	10100	3640	2940	1850	2810	6670	3690	2530	5860	4410	2660
28	3660	10100	3950	3010	1840	2490	7790	3660	2530	5830	4370	2670
29	3570	10200	3650	2950	---	2310	8060	3650	2520	5880	4330	2670
30	3550	10200	3570	2930	---	2220	8150	3680	2500	5850	4340	2690
31	3590	---	3580	3070	---	2100	---	3670	---	5810	4340	---
TOTAL	202460	198610	178430	104860	119710	91840	80570	247170	137710	146210	144030	112170
MEAN	6531	6620	5756	3383	4275	2963	2686	7973	4590	4716	4646	3739
MAX	7730	10200	10200	4600	15800	6720	8150	10900	9240	6070	5720	4390
MIN	3550	3520	3450	2920	1840	1830	1250	3650	2500	2510	4320	2660
AC-FT	401600	393900	353900	208000	237400	182200	159800	490300	273100	290000	285700	222500

CAL YR 1974 TOTAL 3721410 MEAN 10200 MAX 55300 MIN 2590 AC-FT 7381000
WTR YR 1975 TOTAL 1763770 MEAN 4832 MAX 15800 MIN 1250 AC-FT 3498000

11407700 FEATHER RIVER AT YUBA CITY, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: July 1964 to current year.
Sediment records: October 1964 to current year.

EXTREMES.--Current year:
Sediment concentrations: Maximum daily, 840 mg/l Feb. 13; minimum daily, 16 mg/l Apr. 16.
Sediment discharge: Maximum daily, 35,800 tons (32,500 tonnes) Feb. 13; minimum daily, 56 tons (51 tonnes) Apr. 16.
Period of record: Water temperatures: Maximum (1964-67): 32.0°C July 29, 1964; minimum (1964-65), 3.0°C on several days in 1965.
Sediment concentrations: Maximum daily, 840 mg/l Feb. 13, 1975; minimum daily, 6 mg/l Jan. 9, 10, 1969.
Sediment discharge: Maximum daily, 334,000 tons (303,000 tonnes) Dec. 24, 1964; minimum daily, 12 tons (11 tonnes) Oct. 27, 1966.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975 (ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	---	---	---	---	---	11.0	---		19.0	22.0	---
2	---	---	11.0	6.0	---	---	13.5	---		---	---	20.0
3	---	---	11.5	6.0	8.5	14.0	12.5	13.0		19.5	---	---
4	16.5	14.0	12.0	---	9.0	11.5	---	---		---	21.5	---
5	---	---	---	7.0	9.0	12.0	---	---		20.0	---	---
6	---	---	12.0	7.0	8.5	12.0	---	14.0		---	21.0	20.0
7	16.5	12.5	---	7.5	9.0	12.5	11.0	---		21.5	---	---
8	16.5	---	---	8.0	---	---	10.5	---		---	21.0	20.0
9	---	---	10.0	7.0	---	---	---	14.5		23.0	22.0	---
10	14.5	---	9.5	7.5	11.0	11.5	---	---		---	---	---
11	---	13.5	9.5	8.0	12.0	11.5	16.0	---		---	21.5	17.5
12	---	---	10.0	---	10.5	11.5	---	---		---	---	---
13	---	13.0	10.0	7.0	10.5	11.5	---	---		---	20.5	17.0
14	17.0	12.5	---	---	11.0	10.0	14.0	14.0		21.0	---	---
15	---	12.5	---	7.0	---	---	---	---		---	---	19.0
16	16.0	---	10.5	7.0	---	---	12.0	14.0		19.5	20.5	---
17	---	---	11.0	8.0	---	10.5	---	---		---	---	---
18	15.5	12.5	---	---	8.0	10.5	---	---		---	---	---
19	---	---	9.5	---	9.0	12.0	---	---		19.5	20.0	17.5
20	---	12.0	9.0	7.0	8.0	10.5	---	---		---	---	---
21	16.0	---	---	7.0	8.0	---	18.0	---		20.5	20.0	19.5
22	---	12.5	9.0	8.0	---	---	---	16.0		---	---	---
23	14.5	---	7.0	8.0	---	10.0	---	---		22.0	---	19.0
24	---	---	6.0	8.5	8.5	11.0	---	---		---	---	---
25	14.5	12.0	---	---	9.5	---	---	---		22.5	22.0	20.0
26	---	11.0	6.5	9.0	10.0	11.0	---	---		---	---	---
27	---	11.5	7.5	7.0	11.0	11.5	---	---		---	19.5	20.0
28	15.0	---	---	7.0	12.0	10.0	---	---		21.0	---	---
29	---	11.5	---	7.0	---	---	---	---		---	---	17.0
30	---	---	6.5	7.0	---	---	15.0	---		20.5	19.5	---
31	13.5	---	6.0	6.0	---	12.0	---	---		---	---	---
MONTH	---	---	---	---	---	---	---	---		---	---	---

11407700 FEATHER RIVER AT YUBA CITY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		OCTOBER			NOVEMBER			DECEMBER	
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	7710	63	1310	3570	57	549	10100	85	2320
2	7670	68	1410	3530	59	562	10100	70	1910
3	7730	73	1520	3540	63	602	10200	90	2480
4	7700	77	1600	3560	66	634	10200	88	2420
5	7530	84	1710	3580	63	609	10100	97	2650
6	7550	90	1830	3590	59	572	10100	106	2890
7	7570	96	1960	3610	55	536	10000	103	2780
8	7630	88	1810	3580	50	483	10000	90	2430
9	7580	81	1660	3550	49	470	9610	86	2230
10	7580	75	1530	3520	48	456	7750	63	1320
11	7560	74	1510	3530	47	448	5900	65	1040
12	7470	73	1470	3540	57	545	5130	50	693
13	7410	72	1440	4020	67	727	4880	50	659
14	7480	70	1410	6820	140	2580	3710	47	471
15	7480	70	1410	7470	122	2460	3520	45	428
16	7460	72	1450	7480	75	1510	3510	43	408
17	7410	72	1440	7470	69	1390	3570	31	299
18	7370	72	1430	7570	63	1290	3590	27	262
19	7260	77	1510	7610	80	1640	3530	23	219
20	7220	80	1560	7600	96	1970	3520	20	190
21	7270	84	1650	8970	120	2910	3520	20	190
22	7320	86	1700	10000	165	4450	3450	20	186
23	6950	88	1650	10000	145	3920	3470	18	169
24	5270	90	1280	10100	135	3680	3560	20	192
25	3760	95	964	10100	125	3410	3510	20	190
26	3580	88	851	10100	120	3270	3510	20	190
27	3570	79	761	10100	108	2950	3640	20	197
28	3660	73	721	10100	108	2950	3950	20	213
29	3570	66	636	10200	108	2970	3650	20	197
30	3550	60	575	10200	100	2750	3570	20	193
31	3590	55	533	---	---	---	3580	25	242
MONTH	202460	---	42291	198610	---	53293	178430	---	30258

		JANUARY			FEBRUARY			MARCH	
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3560	28	269	10700	70	2020	1870	32	162
2	3570	32	308	11900	280	9000	1930	32	167
3	3550	22	211	4350	235	2760	1860	32	161
4	3480	23	216	5880	110	1750	1830	26	128
5	3500	26	246	2910	101	794	1860	29	146
6	4340	25	293	2540	60	411	1930	24	125
7	4370	33	389	2640	48	342	3380	26	237
8	4600	35	435	4930	44	586	4610	87	1080
9	3770	31	316	4660	101	1270	2950	60	478
10	3640	29	285	4050	50	547	2650	58	415
11	3530	26	248	2690	44	320	2340	46	291
12	3480	24	226	12400	38	1270	2150	55	319
13	3500	24	227	15800	840	35800	2300	41	255
14	3640	29	285	4170	410	4620	2460	60	399
15	3590	35	339	3010	162	1320	2270	50	306
16	3480	33	310	2520	67	456	2930	41	324
17	3220	24	209	2260	58	354	2490	31	208
18	3110	24	202	2160	48	280	3050	27	222
19	3040	24	197	2450	38	251	4860	29	381
20	3020	24	196	2370	72	461	3430	53	491
21	3040	33	271	2070	36	201	4660	37	466
22	3050	33	272	2000	36	194	4660	84	1060
23	3040	29	238	1940	39	204	3100	53	444
24	2980	24	193	1900	39	200	4290	36	417
25	2940	28	222	1870	47	237	6720	128	2320
26	2920	31	244	1850	39	195	3330	46	414
27	2940	37	294	1850	32	160	2810	38	288
28	3010	29	236	1840	32	159	2490	31	208
29	2950	29	231	---	---	---	2310	29	181
30	2930	31	245	---	---	---	2220	26	156
31	3070	33	274	---	---	---	2100	24	136
MONTH	104860	---	8127	119710	---	66162	91840	---	12385

11407700 FEATHER RIVER AT YUBA CITY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1930	26	135	8160	150	3300	3670	30	297
2	1740	26	122	8970	160	3880	3690	30	299
3	1590	26	112	10300	207	5760	3640	30	295
4	1490	20	80	10400	260	7300	4150	70	784
5	1680	20	91	10400	215	6040	6260	80	1350
6	1650	20	89	10400	210	5900	8120	110	2410
7	1570	20	85	10400	190	5340	9150	110	2720
8	1700	18	83	10400	170	4770	9240	120	2990
9	1560	18	76	10600	150	4290	9160	110	2720
10	1470	20	79	10700	140	4040	9180	100	2480
11	1400	20	76	10600	140	4010	8300	94	2110
12	1340	20	72	10700	150	4330	7180	88	1710
13	1350	21	77	10900	160	4710	6160	82	1360
14	1360	21	77	10900	156	4590	4990	76	1020
15	1340	18	65	10800	140	4080	4310	60	698
16	1300	16	56	10800	130	3790	4210	50	568
17	1290	18	63	9770	120	3170	3140	46	390
18	1280	18	62	8640	100	2330	2650	42	301
19	1270	21	72	8500	90	2070	2610	39	275
20	1250	26	88	7700	100	2080	2610	37	261
21	1630	36	158	6310	80	1360	2590	35	245
22	2120	36	206	5980	72	1160	2530	30	205
23	2560	72	498	5020	66	895	2530	28	191
24	3580	88	851	4090	44	486	2520	28	191
25	4770	115	1480	3690	40	399	2520	26	177
26	5680	90	1380	3690	38	379	2520	26	177
27	6670	110	1980	3690	36	359	2530	25	171
28	7790	150	3150	3660	34	336	2530	25	171
29	8060	200	4350	3650	32	315	2520	24	163
30	8150	160	3520	3680	31	308	2500	24	162
31	---	---	---	3670	30	297	---	---	---
MONTH	80570	---	19233	247170	---	92074	137710	---	26891

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2510	24	163	5720	60	927	4350	62	728
2	2510	23	156	5210	54	760	4390	62	735
3	2520	22	150	5450	48	706	4350	65	763
4	2520	23	156	5370	42	609	4350	68	799
5	2520	24	163	5350	46	664	4330	72	842
6	2530	23	157	5360	50	724	4310	75	873
7	2520	22	150	5160	47	655	4260	61	702
8	2540	23	158	5140	44	611	4310	46	535
9	2550	24	165	5130	48	665	4350	46	540
10	2550	24	165	4430	45	538	4360	46	542
11	3690	35	349	4340	37	434	4340	46	539
12	4890	60	792	4350	33	388	4330	54	631
13	5920	85	1360	4370	29	342	4330	62	725
14	6070	88	1440	4320	31	362	4270	55	634
15	6020	90	1460	4350	33	388	4260	48	552
16	6050	82	1340	4360	33	388	4220	48	547
17	5930	80	1280	4350	35	411	4200	47	533
18	5870	78	1240	4390	36	427	4180	47	530
19	5830	74	1160	4430	37	443	4230	46	525
20	5890	62	986	4420	36	430	3580	58	561
21	5900	50	796	4410	35	417	2790	65	490
22	5940	51	818	4400	36	428	2690	58	421
23	5930	52	833	4380	37	438	2670	50	360
24	5940	52	834	4340	40	469	2670	47	339
25	5940	52	834	4350	42	493	2680	43	311
26	5900	51	812	4360	42	494	2680	47	340
27	5860	51	807	4410	42	500	2660	50	359
28	5830	51	803	4370	48	566	2670	50	360
29	5880	50	794	4330	55	643	2670	50	360
30	5850	50	790	4340	62	727	2690	50	363
31	5810	55	863	4340	62	727	---	---	---
MONTH	146210	---	21974	144030	---	16774	112170	---	16539
YEAR	1763770		406081.0						

11407700 FEATHER RIVER AT YUBA CITY, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
NOV.										
15...	1155	--	7470	123	2480	--	--	--	--	--
DEC.										
19...	1215	9.5	3530	26	248	--	--	--	--	--
JAN.										
23...	1050	8.0	3040	28	230	--	--	--	--	--
FEB.										
03...	1215	8.5	4350	232	2730	--	--	--	--	--
10...	1215	11.0	4050	45	492	--	--	--	--	--
13...	1215	10.5	15800	1040	44400	17	24	35	51	71
13...	1655	11.0	15800	1130	48200	16	23	34	51	69
14...	1220	11.0	4170	261	2940	--	--	--	--	--
14...	1925	10.5	4170	331	3730	--	--	--	--	--
27...	1030	11.0	1850	22	110	--	--	--	--	--
APR.										
03...	1150	10.0	1590	19	82	--	--	--	--	--
30...	0735	15.0	8150	160	3520	--	--	--	--	--
JULY										
01...	1120	19.0	2510	18	122	--	--	--	--	--

DATE	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
NOV.									
15...	36	--	72	--	96	--	100	--	--
DEC.									
19...	--	68	--	76	--	82	--	91	100
JAN.									
23...	--	75	--	84	--	93	--	100	--
FEB.									
03...	--	80	--	89	--	98	--	100	--
10...	--	94	--	99	--	100	--	--	--
13...	85	--	94	--	99	--	100	--	--
13...	84	--	92	--	98	--	100	--	--
14...	--	90	--	96	--	99	--	100	--
14...	--	82	--	92	--	98	--	100	--
27...	--	99	--	100	--	--	--	--	--
APR.									
03...	--	86	--	93	--	97	--	100	--
30...	--	37	--	65	--	90	--	98	100
JULY									
01...	--	94	--	100	--	--	--	--	--

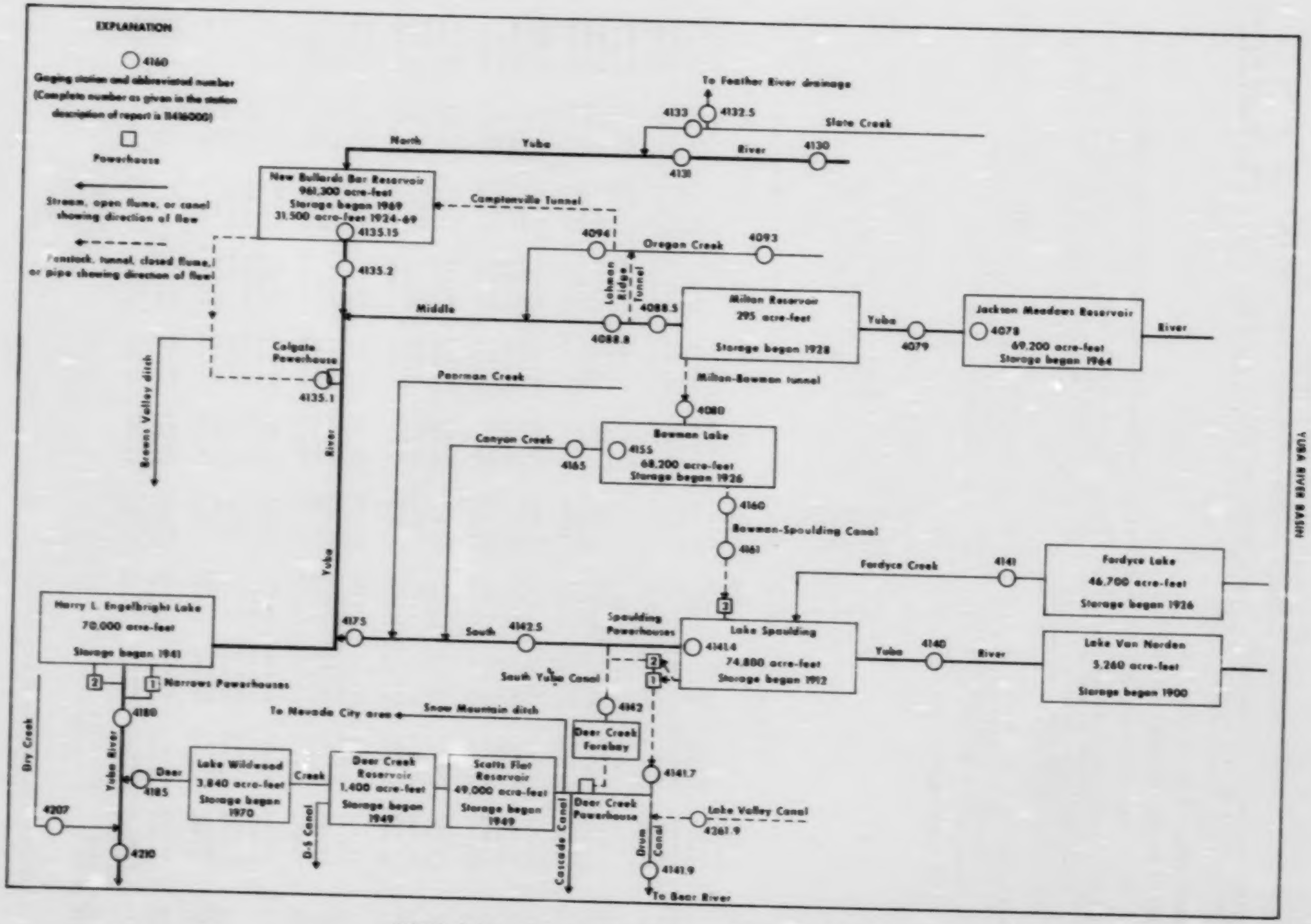

EXPLANATION
4160
Gaging station and abbreviated number
(Complete number as given in the station description of report is 11416000)
Powerhouse
Stream, open flume, or canal showing direction of flow
Penstock, tunnel, closed flume, or pipe showing direction of flow
To Feather River drainage
4133
4132.5
Slate Creek
North
Yuba
River
4131
4130
New Bullards Bar Reservoir
961,300 acre-feet
Storage began 1969
31,500 acre-feet 1924-69
4135.15
4135.2
Camptonville Tunnel
4094
4093
Oregon Creek
Lohman Ridge Tunnel
Middle
4088.8
4088.5
Milton Reservoir
295 acre-feet
Storage began 1928
Yuba
4079
Jackson Meadows Reservoir
4078
69,200 acre-feet
Storage began 1964
River
Colgate Powerhouse
4135.1
Browns Valley ditch
Milton-Bowman tunnel
Poorman Creek
4080
Bowman Lake
4155
68,200 acre-feet
Storage began 1926
Canyon Creek
4165
River
Yuba
4160
Bowman-Spaulding Canal
4161
Fordyce Creek
4141
Fordyce Lake
46,700 acre-feet
Storage began 1926
Harry L. Engelbright Lake
70,000 acre-feet
Storage began 1941
4175
South
4142.5
Spaulding Powerhouses
3
2
1
Lake Spaulding
4141.4
74,800 acre-feet
Storage began 1912
Yuba
4140
River
Lake Van Norden
5,260 acre-feet
Storage began 1900
Narrows Powerhouses
South Yuba Canal
4142
Deer Creek Forebay
To Nevada City area
Snow Mountain ditch
4180
Dry Creek
Yuba River
Deer
4185
Lake Wildwood
3,840 acre-feet
Storage began 1970
Creek
Deer Creek Reservoir
1,400 acre-feet
Storage began 1949
Scotts Flat Reservoir
49,000 acre-feet
Storage began 1949
D-S Canal
Cascade Canal
Deer Creek Powerhouse
4141.7
Lake Valley Canal
4261.9
Drum Canal
4141.9
To Bear River
4207
4210

FIGURE 8.–Schematic diagram showing diversions and storage in Yuba River basin.

11407800 JACKSON MEADOWS RESERVOIR NEAR SIERRA CITY, CALIF.

LOCATION.--Lat 39°30'40", long 120°33'15", in NW¼SE¼ sec.18, T.19 N., R.13 E., Sierra County, Tahoe National Forest, on right bank at Jackson Meadows Dam on Middle Yuba River, 0.7 mi (1.1 km) downstream from Pass Creek, and 5.7 mi (9.2 km) southeast of Sierra City.

DRAINAGE AREA.--37.6 mi² (97.4 km²).

PERIOD OF RECORD.--November 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Nevada Irrigation District).

EXTREMES.--Current year: Maximum contents, 70,500 acre-ft (86.9 hm³) June 14, 15 (elevation, 6,037.2 ft or 1,840.14 m); minimum, 21,600 acre-ft (26.6 hm³) Apr. 30 (elevation, 5,981.0 ft or 1,823.01 m).

Period of record: Maximum contents, 71,000 acre-ft (87.5 hm³) on several days in 1969-71 (elevation, 6,037.7 ft or 1,840.29 m); minimum since reservoir first filled, 20,300 acre-ft (25.0 hm³) Oct. 21 to Nov. 1, 1968 (elevation, 5,978.7 ft or 1,822.31 m).

REMARKS.--Reservoir is formed by an earthfill dam. Storage began Nov. 9, 1964. Usable capacity, 66,700 acre-ft (82.2 hm³) between elevations 5,933.0 ft (1,808.38 m), bottom of intake tower and 6,036.0 ft (1,839.77 m), top of spillway Tainter gates. Dead storage, 2,500 acre-ft (3.08 hm³). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Yuba River basin.

REVISIONS (WATER YEARS).--WRD Calif. 1970: 1969.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,960	10,600	6,010	43,900
5,970	15,400	6,020	53,200
5,980	21,000	6,030	63,000
5,990	27,600	6,040	73,500
6,000	35,300		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41,100	24,000	21,900	22,400	23,200	24,600	26,700	21,700	53,500	70,000	69,500	61,900
2	40,500	23,500	21,900	22,400	23,300	24,600	26,700	21,900	55,300	70,200	69,500	61,300
3	39,900	22,900	22,100	22,400	23,400	24,600	26,800	22,200	57,100	70,000	69,400	60,800
4	39,300	22,400	22,100	22,400	23,500	24,700	26,900	22,400	59,200	70,200	69,400	60,200
5	38,700	22,200	22,100	22,500	23,500	24,700	27,000	22,500	61,300	70,200	69,500	59,600
6	38,200	22,000	22,100	22,600	23,500	24,800	27,000	22,600	63,500	70,200	69,400	59,000
7	37,600	21,700	22,100	22,700	23,500	24,900	27,100	22,900	65,500	70,200	69,400	58,400
8	37,000	21,700	22,200	22,800	23,600	25,000	27,200	23,100	67,100	70,200	69,400	57,800
9	36,500	21,700	22,200	22,800	23,800	25,000	27,300	23,600	68,200	70,000	69,400	57,200
10	35,800	21,700	22,200	22,800	23,800	25,000	27,100	24,200	68,700	70,000	69,400	56,500
11	35,300	21,700	22,200	22,800	23,900	25,100	26,800	24,800	69,300	70,000	69,400	56,000
12	34,800	21,700	22,200	22,800	24,000	25,100	26,500	25,700	69,800	70,000	69,400	55,400
13	34,200	21,700	22,200	22,900	24,100	25,200	26,200	26,800	70,200	69,900	69,400	54,800
14	33,600	21,700	22,200	22,900	24,200	25,200	25,900	28,000	70,500	69,900	69,300	54,200
15	33,100	21,700	22,200	22,900	24,200	25,300	25,600	29,200	70,500	69,800	69,300	53,600
16	32,500	21,700	22,200	22,900	24,200	25,300	25,200	30,200	70,400	69,900	69,300	53,100
17	32,000	21,700	22,300	22,900	24,200	25,400	25,000	31,500	70,000	69,800	69,300	52,500
18	31,500	21,800	22,300	22,900	24,200	25,400	24,600	32,900	69,600	69,800	69,300	51,900
19	30,900	21,800	22,300	22,900	24,400	25,500	24,200	34,400	69,300	69,800	69,200	51,400
20	30,400	21,700	22,300	22,900	24,400	25,500	24,000	35,500	69,100	69,800	68,900	50,700
21	29,800	21,900	22,300	22,900	24,400	25,700	23,700	36,200	68,900	69,800	68,400	50,200
22	29,300	21,900	22,300	22,900	24,400	25,800	23,500	36,900	68,600	69,800	67,800	49,500
23	28,800	21,900	22,300	22,900	24,400	25,900	23,200	38,000	68,400	69,700	67,200	49,000
24	28,200	21,900	22,300	22,900	24,400	26,000	23,000	39,400	68,200	69,700	66,700	48,300
25	27,600	21,900	22,300	22,900	24,400	26,200	22,800	40,900	68,300	69,700	66,100	47,800
26	27,100	21,900	22,300	23,000	24,500	26,300	22,600	42,300	68,800	69,700	65,500	47,100
27	26,600	21,900	22,400	23,000	24,500	26,300	22,400	43,900	69,200	69,600	64,800	46,500
28	26,100	21,900	22,400	23,000	24,600	26,400	22,100	45,600	69,600	69,600	64,300	45,900
29	25,600	21,900	22,400	23,000	------	26,500	21,900	47,300	69,900	69,500	63,800	45,300
30	25,000	21,900	22,400	23,000	------	26,600	21,600	49,200	70,000	69,500	63,200	44,800
31	24,600	------	22,400	23,100	------	26,600	------	51,400	------	69,500	62,500	------
MAX	41,100	24,000	22,400	23,100	24,600	26,600	27,300	51,400	70,500	70,200	69,500	69,000
MIN	24,600	21,700	21,900	22,400	23,200	24,600	21,600	21,700	53,500	69,500	62,500	44,800
(a)	5,985.6	5,981.4	5,982.3	5,983.3	5,985.6	5,988.6	5,981.0	6,018.1	6,036.8	6,036.3	6,029.5	6,010.9
(b)	-17,000	-2,700	+500	+700	+1,500	+2,000	-5,000	+29,800	+18,600	-500	-7,000	-17,700

CAL YR 1974 b -18,500
WTR YR 1975 b +3,200

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11407900 MIDDLE YUBA RIVER BELOW JACKSON MEADOWS DAM, NEAR SIERRA CITY, CALIF.

LOCATION.--Lat 39°30'58", long 120°33'40", in SE¼NW¼ sec.18, T.19 N., R.13 E., Sierra County, Tahoe National Forest, on right bank 0.6 mi (1.0 km) downstream from Jackson Meadows Dam, and 5.2 mi (8.4 km) southeast of Sierra City.

DRAINAGE AREA.--38.3 mi² (99.2 km²).

PERIOD OF RECORD.--October 1964 to current year. If record for Milton-Bowman tunnel near Graniteville is added to record published as Middle Yuba River at Milton, a record equivalent to this site can be obtained for the period 1928-64.

GAGE.--Water-stage recorder. Datum of gage is 5,717.20 ft (1,742.603 m) above mean sea level (levels by Nevada Irrigation District).

AVERAGE DISCHARGE (adjusted for change in contents in Jackson Meadows Reservoir).--11 years, 123 ft³/s (3.483 m³/s), 89,110 acre-ft/yr (109.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 710 ft³/s (20.1 m³/s) June 16 (gage height, 5.12 ft or 1.561 m); maximum gage height, 8.50 ft (2.591 m) Apr. 10 (backwater from snow); minimum daily, 3.5 ft³/s (0.099 m³/s) Nov. 14-17.

Period of record: Maximum discharge, 2,300 ft³/s (65.1 m³/s) Sept. 1, 1965 (gage height, 6.60 ft or 2.012 m), from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of computation of flow over Milton Dam at gage height, 10.57 ft (3.222 m); minimum daily, 0.1 ft³/s (0.003 m³/s) Oct. 1, 2, 1964.

Maximum stage known since at least 1925, 10.57 ft (3.222 m) Jan. 31, 1963, from floodmarks (discharge, 10,000 ft³/s or 283 m³/s, by computation of flow over Milton Dam, adjusted for diversion and inflow).

REMARKS.--Records fair. Flow regulated by Jackson Meadows Reservoir since November 1964 (see sta 11407800). See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267	251	3.7	4.4	5.3	6.2	7.0	83	17	176	21	276
2	267	251	3.7	4.4	5.3	6.5	7.0	9.4	16	179	19	278
3	267	251	5.1	4.4	5.3	6.8	7.0	10	16	171	17	276
4	264	251	6.0	4.4	5.1	6.8	6.8	9.4	16	152	15	275
5	264	251	4.6	4.4	5.0	6.8	6.8	8.2	15	152	12	275
6	264	118	4.6	4.4	5.0	6.8	6.8	7.9	14	150	10	275
7	264	4.2	4.4	5.0	5.0	7.0	6.5	8.5	13	155	9.3	275
8	264	4.2	4.2	5.8	5.3	7.0	6.5	10	12	152	9.6	275
9	264	4.0	4.2	5.6	6.6	7.0	6.2	12	202	139	11	277
10	264	4.0	4.0	5.5	6.1	6.5	63	14	390	128	11	278
11	264	4.0	4.0	5.3	5.4	6.5	176	16	404	126	10	277
12	264	3.8	4.4	5.1	5.4	6.2	174	17	428	115	9.8	277
13	264	3.7	4.6	5.1	5.5	6.0	172	18	500	102	9.6	275
14	260	3.5	4.8	5.1	5.6	6.0	172	19	600	92	9.5	272
15	257	3.5	4.6	4.8	5.8	6.0	172	18	675	86	9.5	272
16	257	3.5	4.4	4.8	5.8	5.8	172	18	685	81	9.5	275
17	257	3.5	4.4	5.1	5.8	5.8	172	18	635	73	9.8	278
18	257	4.0	4.2	5.1	5.8	5.8	172	20	556	66	9.9	278
19	257	3.8	4.2	5.1	5.8	5.8	170	20	484	61	68	277
20	254	3.8	4.2	5.1	5.8	5.8	170	17	452	57	191	278
21	257	4.0	4.2	4.8	5.5	5.8	170	14	448	52	269	277
22	257	4.2	4.2	4.8	5.5	5.8	170	15	448	45	288	275
23	257	4.0	4.4	4.8	5.5	5.5	170	17	440	42	289	278
24	254	4.0	4.4	5.1	5.5	6.5	172	19	424	38	295	279
25	254	4.0	4.4	5.1	5.5	13	174	19	128	36	295	275
26	254	3.8	4.4	5.1	5.5	8.5	170	18	42	33	292	274
27	254	3.7	4.4	5.1	5.5	7.3	170	18	42	30	286	273
28	254	3.8	4.4	4.8	6.0	7.0	170	19	48	28	283	272
29	254	3.8	4.4	4.8	---	6.8	170	19	89	33	278	272
30	254	3.8	4.4	4.8	---	6.8	170	18	133	32	278	279
31	254	---	4.4	4.8	---	7.3	---	19	---	24	278	---
TOTAL	8043	1466.4	136.3	152.9	155.2	207.4	3551.6	540.4	8372	2806	3602.5	8273
MEAN	259	48.9	4.40	4.93	5.54	6.69	118	17.7	279	90.5	116	276
MAX	267	251	6.0	5.8	6.6	13	176	83	685	179	295	279
MIN	254	3.5	3.7	4.4	5.0	5.5	6.2	7.9	12	24	9.3	272
AC-FT	15950	2910	270	303	308	411	7040	1090	16610	5570	7150	16410

CAL YR 1974 TOTAL 61329.7 MEAN 168 MAX 912 MIN 3.5 AC-FT 121600 MEAN a 142 AC-FT a 103,100
WTR YR 1975 TOTAL 37314.7 MEAN 102 MAX 685 MIN 3.5 AC-FT 74010 MEAN a 107 AC-FT a 77,210

a Adjusted for change in contents in Jackson Meadows Reservoir.

11408000 MILTON-BOWMAN TUNNEL OUTLET NEAR GRANITEVILLE, CALIF.

LOCATION.--Lat 39°27'36", long 120°36'40", in NW¼NE¼ sec.3, T.18 N., R.12 E., Nevada County, on right bank 100 ft (30 m) downstream from tunnel outlet near upper end of Bowman Lake, and 6.9 mi (11.1 km) east of Graniteville.

PERIOD OF RECORD.--May 1928 to September 1930, February 1931 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1962, published as "Milton-Bowman tunnel at outlet."

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 5,592.51 ft (1,704.597 m) above mean sea level. Prior to Sept. 22, 1964, at datum 0.56 ft (0.171 m) higher.

AVERAGE DISCHARGE.--47 years, 73.6 ft^3/s (2.084 m^3/s), 53,320 acre-ft/yr (65.7 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 492 ft^3/s (13.9 m^3/s) Feb. 11, 1941; minimum daily, 0.4 ft^3/s (0.01 m^3/s) Oct. 7, 1944.

REMARKS.--Records excellent. Tunnel diverts from Middle Yuba River at Milton, in sec.12, T.19 N., R.12 E., and discharges into Bowman Lake. Practically the entire flow of Middle Yuba River is diverted during low and medium flows. Middle Yuba River flow is regulated by Jackson Meadows Reservoir (see sta 11407800) since November 1964. See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	273	2.7	2.9	5.3	8.3	12	130	86	16	20	290
2	299	270	2.7	2.9	5.6	8.6	11	26	77	15	18	291
3	299	269	5.6	2.9	4.9	8.6	11	29	76	15	16	295
4	298	267	13	3.3	4.9	8.9	11	27	79	15	14	294
5	297	265	6.7	3.1	4.4	9.2	11	22	80	15	12	294
6	295	173	5.3	4.6	4.4	9.5	10	21	79	14	7.2	291
7	294	12	4.9	6.7	4.6	10	10	23	71	14	5.6	291
8	293	8.0	4.4	8.6	5.8	11	9.5	28	64	14	4.4	290
9	293	6.3	4.0	5.8	9.2	10	8.9	36	46	13	6.1	292
10	292	5.6	4.0	5.1	8.0	9.2	42	44	32	13	6.7	297
11	291	5.3	3.8	4.6	6.7	8.6	185	52	31	13	6.3	295
12	290	5.1	4.9	4.6	6.7	8.3	182	58	31	12	5.8	295
13	289	4.9	5.6	4.6	8.6	8.6	184	63	31	12	5.8	294
14	289	4.6	4.6	4.6	8.9	8.6	180	68	31	12	5.8	292
15	288	4.4	4.4	4.6	7.4	7.4	176	66	31	11	5.6	291
16	287	4.2	4.2	4.4	7.2	8.0	198	60	29	11	5.6	293
17	286	4.2	4.0	4.4	6.7	7.2	188	64	28	11	5.8	299
18	284	4.6	3.8	4.4	6.7	6.9	183	70	26	11	8.3	298
19	283	4.2	3.5	4.2	6.9	7.7	181	72	24	11	51	298
20	282	4.0	3.5	4.2	7.4	8.0	181	60	24	11	199	297
21	281	7.2	3.8	4.2	6.7	7.7	183	43	23	11	270	295
22	281	7.2	3.8	4.2	6.1	7.7	184	44	23	11	292	293
23	284	5.1	3.3	4.4	6.1	7.2	184	52	22	11	293	293
24	284	4.9	3.1	4.4	6.1	8.0	191	61	21	45	296	295
25	283	5.3	3.1	4.6	6.1	25	196	62	19	73	296	294
26	281	4.6	3.1	5.1	6.1	16	188	60	18	50	299	293
27	280	4.4	4.2	4.9	6.3	14	185	62	18	30	296	292
28	288	4.0	4.4	4.4	7.4	12	186	64	17	26	294	291
29	279	3.1	3.3	4.2	---	12	188	68	17	29	293	290
30	276	2.9	3.1	4.0	---	12	189	75	16	31	292	292
31	275	---	3.1	4.2	---	13	---	89	---	24	291	---
TOTAL	8921	1643.1	133.9	139.1	181.2	307.2	3848.4	1699	1170	600	3621.0	8805
MEAN	288	54.8	4.32	4.49	6.47	9.91	128	54.8	39.0	19.4	117	294
MAX	300	273	13	8.6	9.2	25	198	130	86	73	299	299
MIN	275	2.9	2.7	2.9	4.4	6.9	8.9	21	16	11	4.4	290
AC-FT	17690	3260	266	276	359	609	7630	3370	2320	1190	7180	17460

CAL YR 1974 TOTAL 29737.8 MEAN 81.5 MAX 310 MIN 2.7 AC-FT 58980
WTR YR 1975 TOTAL 31068.9 MEAN 85.1 MAX 300 MIN 2.7 AC-FT 61630

11408850 MIDDLE YUBA RIVER NEAR CAMPTONVILLE, CALIF.

LOCATION.--Lat 39°25'01", long 120°57'06", in SW¼SE¼ sec.15, T.18 N., R.9 E., Sierra County, Tahoe National Forest, on right bank 0.6 mi (1.0 km) downstream from Kanaka Creek, and 5.8 mi (9.3 km) southeast of Camptonville.

DRAINAGE AREA.--136 mi² (352 km²).

PERIOD OF RECORD.--August 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,170 ft (661 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 365 ft³/s (10.34 m³/s), 264,400 acre-ft/yr (326 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 3,100 ft³/s (87.8 m³/s) Mar. 25; minimum daily, 33 ft³/s (0.93 m³/s) Oct. 18-26.

Period of record: Maximum discharge, 12,300 ft³/s (348 m³/s) Jan. 21, 1970 (gage height, 14.80 ft or 4.511 m); minimum daily, 21 ft³/s (0.59 m³/s) Oct. 17, 1971.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Natural flow of stream affected by Jackson Meadows Reservoir since November 1964 (see sta 11407800), Milton-Bowman tunnel (see sta 11408000) which diverts above station to Bowman Lake (see sta 11415500), and other small diversions above station. See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	53	48	48	118	427	503	566	1110	344	67	49
2	34	43	48	50	237	479	461	632	1020	359	66	49
3	34	40	126	51	164	457	444	787	951	349	66	47
4	34	39	243	56	197	414	431	782	942	324	64	47
5	34	38	101	54	146	418	415	654	945	308	62	46
6	34	38	71	240	150	462	376	581	951	301	61	45
7	34	41	61	402	207	662	354	579	868	296	61	45
8	34	53	56	633	374	1160	333	648	766	297	61	45
9	34	44	53	251	1070	946	329	756	735	277	61	44
10	35	41	51	167	698	721	343	862	1160	256	61	46
11	35	40	50	129	433	582	345	972	1140	244	60	48
12	35	39	51	110	573	486	371	1070	1130	231	59	46
13	35	38	70	102	1290	444	407	1140	1190	215	59	46
14	34	38	59	97	820	408	468	1250	1260	198	59	43
15	34	38	55	95	610	385	432	1210	1300	188	58	42
16	34	37	53	94	490	445	389	1070	1250	190	58	42
17	34	37	52	92	380	390	358	1120	1150	174	58	42
18	33	40	50	92	270	405	339	1230	1020	162	65	42
19	33	43	48	97	360	500	327	1260	891	155	100	42
20	33	40	48	98	570	650	328	1080	807	146	79	42
21	33	66	48	97	450	635	373	810	789	137	74	41
22	33	110	53	95	370	700	425	741	769	128	71	40
23	33	64	48	94	308	650	432	785	749	119	66	40
24	33	55	43	92	280	950	700	915	758	113	62	39
25	33	64	46	92	283	3100	943	979	650	94	60	39
26	33	60	46	99	291	1350	699	957	265	78	58	37
27	34	54	64	94	311	900	599	985	225	74	57	37
28	72	51	80	81	368	730	562	1000	215	72	56	37
29	58	49	57	81	---	582	550	1040	222	69	56	37
30	42	49	53	74	---	542	568	1040	266	69	54	37
31	54	---	49	75	---	554	---	1090	---	68	50	---
TOTAL	1140	1442	1981	3932	11810	21534	13604	28591	25494	6035	1949	1282
MEAN	36.8	48.1	63.9	127	422	695	453	922	850	195	62.9	42.7
MAX	72	110	243	633	1290	3100	943	1260	1300	359	100	49
MIN	33	37	43	48	118	385	327	566	215	68	50	37
AC-FT	2260	2860	3930	7800	23430	42710	26980	56710	50570	11970	3870	2540

CAL YR 1974 TOTAL 175411 MEAN 481 MAX 4400 MIN 33 AC-FT 347900
WTR YR 1975 TOTAL 118794 MEAN 325 MAX 3100 MIN 33 AC-FT 235600

NOTE.--No gage-height record Mar. 16-28.

11408880 MIDDLE YUBA RIVER BELOW OUR HOUSE DAM, NEAR CAMPTONVILLE, CALIF.

LOCATION.--Lat 39°24'42", long 120°59'49", in SW¼NW¼ sec.20, T.18 N., R.9 E., Sierra County, Tahoe National Forest, on right bank 400 ft (122 m) downstream from Our House Dam, and 4.0 mi (6.4 km) southeast of Camptonville.

DRAINAGE AREA.--145 mi^2 (376 km^2).

PERIOD OF RECORD.--October 1968 to current year. Prior to September 1974, published as "below Our House Dam."

GAGE.--Water-stage recorder. Datum of gage is 1,957.51 ft (596.649 m) above mean sea level. Prior to Nov. 4, 1970, at datum 10.0 ft (3.05 m) higher.

AVERAGE DISCHARGE.--7 years, 165 ft^3/s (4.673 m^3/s), 119,500 acre-ft/yr (147 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,250 ft^3/s (92.0 m^3/s) Mar. 25 (gage height, 16.47 ft or 5.020 m); minimum daily, 29 ft^3/s (0.82 m^3/s) Oct. 13.

Period of record: Maximum discharge, 12,500 ft^3/s (354 m^3/s) Jan. 21, 1970 (gage height, 20.70 ft or 6.309 m, present datum); minimum daily, 3.2 ft^3/s (0.09 m^3/s) Oct. 21 to Nov. 4, 1970.

REMARKS.--Records good. Natural flow of stream affected by Jackson Meadows Reservoir since November 1964 (see sta 11407800), Milton-Bowman tunnel (see sta 11408000) which diverts above station to Bowman Lake (see sta 11415500), Lohman Ridge tunnel since October 1968 which diverts 400 ft (122 m) upstream to Oregon Creek and then to Bullards Bar Reservoir via Camptonville tunnel. Other small diversions above station. See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	33	32	40	42	43	44	48	248	35	33	32
2	39	33	32	40	45	44	44	49	153	35	33	32
3	36	32	33	40	44	44	43	58	97	36	33	32
4	36	32	47	40	45	44	43	56	82	36	33	32
5	35	32	45	40	44	44	43	49	84	35	33	32
6	34	32	44	43	43	44	43	48	92	35	33	32
7	34	32	44	46	44	56	42	48	74	34	33	32
8	34	33	43	50	46	426	42	49	55	35	33	32
9	34	33	42	45	382	172	42	51	54	34	33	32
10	36	33	42	43	90	48	43	56	257	34	33	32
11	36	32	42	42	46	46	43	170	266	34	33	32
12	34	32	42	42	119	45	43	279	257	34	33	32
13	29	32	42	42	678	44	43	345	307	33	33	32
14	31	32	42	42	105	43	44	447	378	33	33	32
15	32	32	41	42	45	43	44	418	412	33	33	32
16	32	32	41	42	43	44	46	273	371	33	32	33
17	32	32	41	42	42	43	49	319	283	33	32	33
18	32	32	41	42	42	44	49	423	143	33	32	33
19	32	32	41	42	43	49	48	464	51	33	33	33
20	32	32	41	42	47	49	48	275	45	32	33	33
21	32	32	41	42	44	46	49	61	44	32	33	33
22	32	33	41	42	43	45	49	54	44	31	33	33
23	32	33	40	42	42	45	50	55	44	31	33	33
24	32	32	40	42	42	109	141	72	42	32	32	33
25	32	32	39	42	42	2020	200	137	38	34	32	33
26	32	32	39	42	42	641	51	119	35	34	33	34
27	32	32	40	42	42	195	49	141	34	33	32	35
28	33	32	41	42	43	48	48	147	34	33	32	36
29	33	32	41	42	---	46	48	183	34	33	32	36
30	32	32	40	42	---	45	48	180	34	33	32	36
31	32	---	40	42	---	45	---	220	---	33	32	---
TOTAL	1027	967	1260	1309	2375	4700	1619	5294	4092	1039	1013	987
MEAN	33.1	32.2	40.6	42.2	84.8	152	54.0	171	136	33.5	32.7	32.9
MAX	39	33	47	50	678	2020	200	464	412	36	33	36
MIN	29	32	32	40	42	43	42	48	34	31	32	32
AC-FT	2040	1920	2500	2600	4710	9320	3210	10500	8120	2060	2010	1960
(a)	380	1,150	1,720	5,770	20,430	36,510	25,740	50,350	46,140	10,780	2,140	770

CAL YR 1974 TOTAL 50090 MEAN 137 MAX 3400 MIN 21 AC-FT 99350
WTR YR 1975 TOTAL 25682 MEAN 70.4 MAX 2020 MIN 29 AC-FT 50940

a Diversion, in acre-feet, to Lohman Ridge tunnel.

11409300 OREGON CREEK AT CAMPTONVILLE, CALIF.

LOCATION.--Lat 39°26'46", long 121°02'43", in SE¼NE¼ sec.11, T.18 N., R.8 E., Yuba County, Tahoe National Forest, on right bank 25 ft (8 m) downstream from county bridge, 0.5 mi (0.8 km) southeast of Camptonville, and 5.5 mi (8.8 km) upstream from mouth.

DRAINAGE AREA.--23.0 mi² (59.6 km²).

PERIOD OF RECORD.--August 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,230 ft (680 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 80.1 ft³/s (2.268 m³/s), 58,030 acre-ft/yr (71.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,680 ft³/s (47.6 m³/s) Mar. 25 (gage height, 8.12 ft or 2.475 m); minimum daily, 2.0 ft³/s (0.057 m³/s) Sept. 26-28.
Period of record: Maximum discharge, 3,130 ft³/s (88.6 m³/s) Jan. 21, 1970 (gage height, 10.07 ft or 3.069 m); minimum daily, 1.6 ft³/s (0.05 m³/s) Sept. 3, 1972, Sept. 10, 1973.

REMARKS.--Records good. No regulation or diversion above station. See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	7.6	4.6	5.4	18	185	209	178	92	15	5.0	4.1
2	2.6	4.7	4.6	5.5	44	243	185	183	82	13	4.9	4.1
3	2.7	4.0	12	5.3	29	240	174	242	74	13	4.7	3.8
4	2.8	3.9	31	6.9	32	209	164	261	68	13	4.5	3.9
5	2.8	3.8	13	6.9	26	200	150	222	63	13	4.4	3.6
6	2.7	3.6	9.3	71	26	225	130	191	57	12	4.5	3.3
7	2.7	4.8	7.5	112	57	309	120	177	52	12	4.4	3.3
8	2.8	7.8	6.6	236	178	508	108	179	46	11	4.7	3.1
9	2.9	5.4	6.1	69	546	433	108	193	42	11	4.7	3.0
10	3.3	4.6	5.7	42	383	333	119	210	38	10	4.5	3.2
11	3.2	4.3	5.6	31	223	264	138	225	35	10	4.5	3.4
12	3.1	4.2	6.2	25	298	215	158	237	32	9.8	4.1	3.0
13	2.9	4.2	8.0	22	777	188	165	243	30	9.4	3.8	2.8
14	2.9	4.2	6.5	20	404	164	180	249	27	9.0	4.1	2.6
15	2.9	4.0	6.2	19	252	148	161	240	25	9.4	4.0	2.5
16	2.9	4.0	5.9	18	182	141	143	214	24	10	3.8	2.4
17	2.9	4.2	5.6	17	134	124	128	200	23	8.5	3.7	2.3
18	2.9	6.6	5.4	17	108	211	117	200	23	8.0	5.0	2.4
19	2.9	6.0	5.3	17	325	422	111	197	22	7.8	8.4	2.3
20	2.9	5.0	5.1	16	434	393	112	177	21	7.5	7.0	2.3
21	3.0	9.5	5.8	16	260	302	124	142	20	7.3	6.2	2.3
22	3.0	12	6.7	15	194	255	137	118	19	7.0	5.7	2.1
23	3.0	7.0	5.1	15	156	210	141	107	18	6.8	5.4	2.1
24	3.2	5.7	4.7	14	142	376	242	109	22	6.6	5.0	2.1
25	3.4	8.8	5.7	14	136	1270	334	115	21	6.3	4.3	2.1
26	3.4	7.7	5.1	18	133	649	264	112	18	6.1	4.1	2.0
27	3.8	6.1	7.6	17	140	441	221	108	17	6.0	4.1	2.0
28	11	5.4	10	15	161	337	199	107	17	5.7	4.2	2.0
29	6.7	5.0	6.6	15	---	274	187	107	16	5.6	4.3	2.3
30	4.0	4.7	6.3	13	---	267	185	102	15	5.4	4.4	2.4
31	8.4	---	5.1	15	---	234	---	96	---	5.2	3.9	---
TOTAL	110.3	168.8	228.9	929.0	5798	9750	4914	5441	1059	280.4	146.3	82.8
MEAN	3.56	5.63	7.38	30.0	207	315	164	176	35.3	9.05	4.72	2.76
MAX	11	12	31	236	777	1270	334	261	92	15	8.4	4.1
MIN	2.6	3.6	4.6	5.3	18	124	108	96	15	5.2	3.7	2.0
AC-FT	219	335	454	1840	11500	19340	9750	10790	2100	556	290	164

CAL YR 1974 TOTAL 29091.4 MEAN 79.7 MAX 1140 MIN 2.6 AC-FT 57700
WTR YR 1975 TOTAL 28908.5 MEAN 79.2 MAX 1270 MIN 2.0 AC-FT 57340

Peak discharge (base, 500 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-9	0600	6.39	836	3-8	0800	5.64	549
2-13	1200	6.89	1,050	3-19	1630	6.09	716
2-19	2030	6.67	952	3-25	0330	8.12	1,680

11409400 OREGON CREEK BELOW LOG CABIN DAM, NEAR CAMPTONVILLE, CALIF.

LOCATION.--Lat 39°26'22", long 121°03'29", in SW¼SW¼ sec.11, T.18 N., R.8 E., Yuba County, Tahoe National Forest, on right bank 500 ft (152 m) downstream from Log Cabin Dam, 670 ft (204 m) upstream from High Point Ravine, and 1.1 mi (1.8 km) southwest of Camptonville.

DRAINAGE AREA.--29.1 mi² (75.4 km²).

PERIOD OF RECORD.--August 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,919.96 ft (585.204 m) above mean sea level (levels by Yuba County Water Agency). Prior to July 24, 1973, at site 470 ft (143 m) downstream at datum 8.40 ft (2.560 m) lower.

AVERAGE DISCHARGE.--7 years, 48.2 ft³/s (1.365 m³/s), 34,920 acre-ft/yr (43.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,790 ft³/s (50.7 m³/s) Mar. 25 (gage height, 7.48 ft or 2.280 m), from rating curve extended above 600 ft³/s (17.0 m³/s) on basis of computation of flow over Log Cabin Dam; minimum daily, 3.9 ft³/s (0.11 m³/s) Oct. 22.

Period of record: Maximum discharge, 4,180 ft³/s (118 m³/s) Jan. 21, 1970 (gage height, 7.02 ft or 2.140 m, previous site and datum); maximum gage height, 7.51 ft (2.289 m) Jan. 16, 1970; minimum daily discharge, 0.34 ft³/s (0.01 m³/s) Sept. 18, 1972.

REMARKS.--Records good. Camptonville tunnel, maximum capacity, about 830 ft³/s (23.5 m³/s), 520 ft (158 m) upstream, diverts to New Bullards Bar Reservoir (see sta 11413515); diversion began October 1968. See schematic diagram showing diversions and storage in Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	14	9.8	6.9	7.8	11	12	13	14	7.0	8.4	7.9
2	6.2	13	9.8	6.3	9.1	12	12	13	13	7.0	8.4	8.0
3	5.9	13	10	5.5	8.4	12	13	14	13	7.0	8.4	7.8
4	6.0	13	12	5.4	8.6	11	13	14	13	8.2	8.4	7.8
5	5.9	13	10	5.5	8.0	11	13	13	13	9.3	8.4	7.8
6	5.7	13	9.9	7.4	7.9	12	13	13	13	9.3	8.4	7.8
7	5.7	13	9.8	12	8.5	12	13	13	13	9.2	8.4	7.8
8	5.9	14	9.2	13	10	70	12	13	13	9.1	8.4	7.8
9	6.0	14	8.7	11	147	23	12	13	12	9.1	8.4	7.8
10	6.0	14	8.6	9.2	23	13	12	14	13	9.0	8.4	7.7
11	5.7	13	8.8	8.7	11	12	12	14	13	8.9	8.4	7.6
12	5.6	13	8.8	8.5	42	12	12	14	13	8.8	8.4	7.6
13	5.5	13	9.0	8.6	452	11	13	14	13	8.8	8.4	7.6
14	5.6	12	9.1	8.0	30	11	13	14	13	8.6	8.4	7.5
15	5.6	12	9.0	7.6	12	11	12	14	13	8.6	8.4	7.4
16	5.6	12	8.7	7.6	12	11	12	14	11	8.6	8.4	7.5
17	5.3	12	8.4	7.6	11	11	12	14	9.1	8.6	8.4	7.8
18	5.0	11	8.4	7.6	11	12	12	14	9.1	8.9	8.5	8.4
19	5.0	11	8.4	7.6	93	49	12	14	9.0	9.1	8.8	8.4
20	4.4	11	8.4	7.6	42	18	12	14	8.7	9.1	8.6	8.4
21	4.2	11	8.4	7.6	12	13	12	14	8.6	9.1	8.5	8.4
22	3.9	15	8.6	7.6	11	12	12	13	8.5	8.9	8.4	8.4
23	4.9	15	8.4	7.6	11	12	12	13	8.5	8.8	8.4	8.4
24	5.6	14	8.1	7.5	11	96	13	14	8.6	8.8	8.4	8.3
25	5.6	15	8.2	7.4	11	1140	15	14	8.4	8.6	8.2	8.1
26	5.3	13	8.1	7.5	11	293	14	14	6.9	8.5	8.2	7.9
27	5.2	10	7.9	7.5	11	31	13	14	6.7	8.5	8.0	7.2
28	5.7	9.9	8.4	7.4	11	13	13	14	6.7	8.4	8.0	5.3
29	6.0	9.8	8.0	7.4	---	12	13	14	6.7	8.4	8.0	5.1
30	5.7	9.8	7.8	7.3	---	12	13	14	6.9	8.4	7.9	5.1
31	13	---	7.4	7.4	---	12	---	14	---	8.4	7.8	---
TOTAL	179.5	376.5	274.1	243.8	1043.3	1991	377	425	318.4	267.0	258.5	228.6
MEAN	5.79	12.6	8.84	7.86	37.3	64.2	12.6	13.7	10.6	8.61	8.34	7.62
MAX	13	15	12	13	452	1140	15	14	14	9.3	8.8	8.4
MIN	3.9	9.8	7.4	5.4	7.8	11	12	13	6.7	7.0	7.8	5.1
AC-FT	356	747	544	484	2070	3950	748	843	632	530	513	453
(a)	301	827	1,750	7,620	32,910	57,030	37,320	63,160	48,170	10,950	1,990	524

CAL YR 1974 TOTAL 10802.2 MEAN 29.6 MAX 850 MIN 3.9 AC-FT 21430
WTR YR 1975 TOTAL 5982.7 MEAN 16.4 MAX 1140 MIN 3.9 AC-FT 11870

a Camptonville tunnel diversion, in acre-feet, to New Bullards Bar Reservoir.

11409400 OREGON CREEK BELOW LOG CABIN DAM, NEAR CAMPTONVILLE, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: August 1971 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 22.4°C July 23-25; minimum, 0.5°C Feb. 1.
Period of record:
Water temperatures: Maximum (1971-72, 1973 to current year), 25.0°C July 16-18, 1972; minimum, 0.5°C Dec. 11-14, 1972, Feb. 1, 1975.

REMARKS.--Prior to July 24, 1973, at site 470 ft (143 m) downstream.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	15.0	11.0	10.5	6.0	5.5	3.0	2.0	1.5	0.5	7.0	6.5
2	17.5	15.5	10.5	9.5	6.5	5.5	3.0	2.0	3.0	1.5	7.0	6.5
3	17.5	15.5	10.0	9.5	7.0	6.5	3.5	2.0	3.5	2.0	7.0	5.0
4	17.5	15.5	9.5	9.0	7.5	7.0	3.0	2.5	4.0	3.5	7.5	6.0
5	16.5	14.5	9.5	9.0	7.0	6.5	4.0	3.0	4.5	4.0	7.5	6.5
6	16.0	13.5	9.5	9.0	7.0	6.5	5.5	4.0	5.0	4.5	7.5	7.0
7	16.0	13.5	10.0	9.0	6.5	6.0	6.5	5.5	5.5	5.0	7.5	7.0
8	16.5	14.5	9.0	8.5	6.0	5.5	6.5	6.0	6.0	5.5	7.5	6.5
9	15.5	14.0	9.0	8.5	5.5	5.0	6.0	4.5	6.0	5.0	7.5	7.0
10	15.5	13.5	9.0	8.5	5.5	5.0	5.0	4.5	6.5	5.5	8.0	6.5
11	15.0	13.0	9.0	8.5	6.5	5.0	4.5	4.0	7.0	6.0	8.0	7.0
12	14.5	12.5	9.0	8.5	7.0	6.5	4.0	3.5	6.5	5.5	7.0	6.0
13	14.5	12.0	9.5	9.0	6.5	6.0	4.0	3.5	7.0	6.0	7.0	5.0
14	14.0	12.0	9.5	9.0	6.5	6.0	4.0	3.5	6.5	5.5	7.0	5.0
15	14.5	12.5	9.5	9.5	6.5	6.0	4.5	3.5	5.5	4.5	7.0	5.5
16	15.0	13.0	9.5	9.0	6.5	6.0	4.5	4.0	5.0	4.5	5.5	4.5
17	14.5	13.0	9.5	9.0	6.0	5.5	4.0	4.0	5.0	4.0	6.0	5.5
18	15.0	13.0	10.0	9.5	5.5	5.0	4.5	4.0	5.5	4.0	7.0	5.5
19	14.5	13.0	9.5	8.5	5.5	5.0	5.0	4.0	6.5	5.5	7.0	7.0
20	15.0	13.0	9.0	8.5	6.0	5.0	5.0	4.5	6.5	6.0	7.5	6.5
21	14.5	12.5	9.5	9.0	6.5	5.5	5.0	4.5	6.0	4.5	7.0	4.0
22	14.0	12.0	9.0	8.0	5.5	4.5	5.0	5.0	6.0	4.0	5.5	4.0
23	13.5	11.5	8.0	7.5	4.5	3.5	5.5	5.0	6.0	4.5	7.0	5.0
24	13.0	12.0	7.5	7.0	3.5	3.0	5.5	5.0	6.5	5.0	7.5	6.5
25	13.5	12.0	7.5	7.5	3.5	3.0	6.0	5.5	6.5	5.5	7.5	6.0
26	14.0	12.5	7.5	7.0	3.5	3.0	6.0	5.5	7.0	5.5	7.0	5.0
27	13.0	12.0	7.0	6.5	4.0	3.5	5.5	3.0	7.5	6.5	6.5	5.0
28	12.5	12.0	6.5	6.0	3.5	3.0	3.0	2.0	7.5	6.5	6.5	4.0
29	12.0	11.0	6.5	6.0	3.0	2.5	2.5	2.0	---	---	8.0	4.5
30	11.5	10.5	6.0	5.5	3.5	2.5	2.0	1.5	---	---	9.0	6.0
31	11.0	10.5	---	---	3.0	2.5	1.5	1.0	---	---	8.0	6.5
MONTH	17.5	10.5	11.0	5.5	7.5	2.5	6.5	1.0	7.5	0.5	9.0	4.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	5.0	10.5	7.0	12.5	8.5	16.0	13.0	20.5	19.5	19.0	18.0
2	7.5	5.5	10.5	7.5	11.5	8.5	15.5	13.0	21.0	20.0	19.5	18.0
3	7.5	6.0	10.0	7.0	12.0	9.0	16.0	13.5	21.0	20.0	19.5	18.0
4	6.0	3.5	7.0	5.5	12.5	8.5	16.5	14.0	21.0	20.5	19.5	18.5
5	4.0	3.0	8.0	5.0	13.5	9.5	17.0	14.5	21.5	20.5	20.0	18.5
6	6.5	4.0	10.0	6.0	13.5	10.0	17.5	15.0	21.5	20.5	20.0	18.5
7	6.0	3.5	11.0	7.0	13.0	9.5	18.5	15.5	20.5	19.5	20.0	19.0
8	6.5	4.5	11.5	7.5	13.0	9.5	19.0	16.0	21.0	20.0	20.5	19.0
9	8.0	5.5	11.5	7.5	13.0	10.0	19.5	16.5	21.5	20.0	20.5	19.5
10	8.0	6.0	11.0	8.0	13.0	9.5	19.5	17.5	21.5	20.0	20.5	19.5
11	9.0	6.0	11.5	7.5	12.5	9.5	20.0	17.0	21.5	20.0	19.5	19.0
12	9.0	6.0	11.0	7.0	13.0	10.0	20.0	17.5	22.0	20.5	20.0	19.0
13	9.5	6.5	11.5	7.0	13.0	10.5	20.0	17.5	22.0	20.5	19.5	18.5
14	9.5	6.0	11.0	7.0	13.5	11.0	20.0	18.0	20.5	20.5	19.5	18.5
15	6.5	5.0	10.5	6.5	14.0	11.0	19.5	17.5	21.0	20.0	19.0	18.0
16	7.0	5.0	11.0	6.5	14.0	11.5	19.5	17.0	21.5	20.0	19.0	18.0
17	8.0	5.0	11.5	7.0	14.0	12.0	19.5	18.0	21.0	20.0	19.0	17.5
18	9.0	6.0	11.5	7.5	12.5	10.0	20.5	18.0	20.5	19.5	19.0	18.0
19	9.0	7.0	11.5	7.5	13.0	11.0	21.0	19.0	19.5	19.0	19.0	18.0
20	10.0	7.0	9.5	6.0	14.0	11.0	21.5	19.0	20.5	18.0	19.0	18.0
21	10.0	8.0	9.5	5.5	15.0	12.0	22.0	19.5	20.5	19.5	19.0	18.0
22	10.0	7.0	11.0	7.5	15.0	12.0	22.0	20.0	20.5	19.5	19.0	17.5
23	9.0	7.5	12.0	8.5	14.5	12.5	22.5	20.0	20.5	20.0	18.5	17.0
24	8.0	7.0	12.0	8.5	14.0	11.5	22.5	20.5	21.0	20.0	18.5	17.0
25	7.0	6.0	11.5	7.5	13.5	10.0	22.5	21.0	21.5	20.5	18.0	17.0
26	7.5	5.0	11.5	8.0	15.0	11.5	22.0	21.0	21.0	20.0	17.5	16.0
27	10.0	6.0	11.5	8.0	15.5	13.0	22.0	21.0	20.5	19.5	17.0	15.0
28	10.0	6.5	11.5	7.5	16.0	13.5	22.0	21.0	20.0	19.0	16.5	14.0
29	10.0	6.5	11.5	7.5	16.5	14.0	22.0	21.5	19.5	18.5	16.0	14.0
30	10.0	7.0	12.0	7.5	16.5	14.0	21.5	20.5	19.5	18.5	16.0	14.0
31	---	---	12.5	8.5	---	---	21.0	19.5	19.5	18.5	---	---
MONTH	10.0	3.0	12.5	5.0	16.5	8.5	22.5	13.0	22.0	18.0	20.5	14.0

11410000 MIDDLE YUBA RIVER BELOW OREGON CREEK, NEAR NORTH SAN JUAN, CALIF.

LOCATION.--Lat 39°23'11", long 121°05'18", in NE¼NW¼ sec.33, T.18 N., R.8 E., Yuba County, temperature recorder on right bank 2,000 ft (610 m) downstream from Freeman Crossing, 0.7 mi (1.1 km) downstream from Oregon Creek, and 1.4 mi (2.3 km) northeast of North San Juan.

DRAINAGE AREA.--198 mi² (513 km²).

PERIOD OF RECORD.--Water temperatures: October 1974 to September 1975.

EXTREMES.--Current year:
Water temperatures: Maximum, 29.0°C July 25; minimum, freezing point Dec. 24, Jan. 2, 3.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	14.0	12.0	9.0	---	---	2.0	0.5	3.5	0.5	9.0	8.0
2	19.0	15.5	10.5	7.5	---	---	1.5	0.0	4.5	3.5	10.5	8.0
3	19.0	15.5	10.0	7.0	---	---	1.0	0.0	4.5	3.5	9.5	6.0
4	19.5	15.5	9.5	7.0	8.5	7.0	3.0	1.0	5.5	4.5	9.5	6.5
5	17.5	13.5	9.5	7.0	7.0	6.0	3.0	2.0	5.5	4.0	9.0	8.0
6	17.0	12.0	9.5	7.0	7.5	6.0	5.0	3.0	6.0	5.0	9.5	8.0
7	17.0	12.0	8.5	8.0	6.5	5.0	6.5	5.0	7.0	6.0	8.5	8.0
8	18.0	14.5	9.5	7.0	5.5	4.0	7.5	6.0	8.0	6.5	8.0	7.0
9	18.5	14.0	8.5	6.5	5.0	3.5	6.0	4.5	8.0	6.0	8.0	7.5
10	17.0	13.0	---	---	4.5	3.0	5.0	4.5	7.5	6.5	9.5	7.0
11	16.5	12.5	---	---	6.0	4.5	4.5	3.5	8.5	6.5	10.5	7.0
12	16.5	11.5	---	---	6.5	5.5	4.5	2.5	7.5	7.0	9.5	6.0
13	16.5	11.5	---	---	7.0	5.5	4.0	2.5	7.5	6.5	8.0	5.0
14	15.5	11.0	---	---	6.5	5.5	4.0	2.0	8.0	6.0	9.0	5.0
15	16.0	11.0	---	---	7.0	5.5	4.5	2.5	6.5	4.0	8.0	7.0
16	15.5	11.0	---	---	6.0	5.0	5.0	3.0	6.5	4.0	8.0	6.0
17	15.5	11.5	---	---	5.5	4.0	5.0	3.0	6.0	3.0	6.5	5.5
18	15.5	11.5	---	---	5.0	3.0	5.0	3.0	6.0	3.0	8.0	6.5
19	15.0	11.5	---	---	4.5	3.0	5.0	3.0	7.0	5.5	8.5	7.5
20	15.0	11.5	---	---	5.0	3.0	5.5	3.5	8.0	5.5	9.5	7.0
21	14.5	10.5	---	---	5.0	4.0	6.0	3.5	6.0	3.5	7.5	5.5
22	13.5	9.5	---	---	4.5	2.5	6.0	3.5	6.0	3.0	7.0	5.5
23	13.0	9.5	---	---	2.5	1.0	6.0	4.0	7.0	3.5	7.5	5.5
24	12.5	9.5	---	---	2.0	0.0	6.5	4.0	7.5	4.5	8.0	7.0
25	13.5	10.0	---	---	2.0	0.5	6.5	4.0	8.5	5.5	7.5	6.0
26	13.5	10.5	---	---	2.5	0.5	7.0	5.0	8.5	5.5	7.0	4.5
27	13.0	11.0	---	---	3.5	2.5	5.0	2.5	10.0	7.5	8.0	4.5
28	13.0	11.0	---	---	4.5	2.5	3.5	1.0	10.5	7.5	8.0	4.0
29	12.0	10.0	---	---	2.5	1.0	4.0	2.0	---	---	7.0	4.5
30	11.0	9.0	---	---	3.5	1.5	2.5	0.5	---	---	10.5	6.5
31	11.0	10.5	---	---	2.0	0.5	2.0	1.0	---	---	10.5	7.5
MONTH	19.5	9.0	---	---	8.5	0.0	7.5	0.0	10.5	0.5	10.5	4.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	5.5	12.0	9.0	16.5	12.5	22.5	15.5	25.5	18.5	22.5	16.5
2	9.0	5.5	14.5	10.0	17.0	12.5	22.5	15.5	26.5	19.5	---	---
3	8.5	7.5	11.5	10.5	19.5	12.5	23.0	16.0	27.0	19.5	---	---
4	6.5	6.0	11.0	7.5	20.0	13.0	22.5	16.0	26.5	19.5	---	---
5	6.0	4.0	12.0	6.0	21.0	14.0	24.0	16.5	26.0	19.5	24.0	17.5
6	8.0	4.0	14.0	7.5	21.0	14.5	24.5	17.5	25.5	19.5	24.0	18.0
7	5.0	4.0	15.5	8.5	20.5	14.0	25.5	18.0	25.0	17.5	24.0	18.0
8	8.0	4.5	15.5	10.0	21.0	14.0	26.0	18.5	25.5	18.5	24.0	18.5
9	10.5	5.0	16.0	10.5	21.0	14.0	25.5	19.0	25.5	18.5	---	---
10	11.0	6.0	15.5	11.0	17.5	13.0	24.5	19.0	26.0	18.5	---	---
11	12.0	6.5	16.0	11.0	17.0	12.0	26.5	19.0	25.5	19.0	---	---
12	12.0	7.0	13.0	10.0	17.5	12.0	26.5	19.0	25.5	19.0	---	---
13	12.0	8.0	12.0	10.0	17.5	13.0	26.5	19.5	25.5	19.0	---	---
14	10.0	9.5	13.5	9.5	17.5	13.5	26.5	19.5	24.5	19.0	---	---
15	9.5	6.5	11.5	9.0	17.0	13.5	21.5	19.5	24.0	18.5	---	---
16	8.5	5.5	14.0	9.0	17.5	13.5	26.0	19.0	25.0	18.5	---	---
17	11.5	5.5	15.0	10.5	17.5	14.0	25.5	19.5	23.0	18.5	23.0	17.5
18	12.5	6.5	14.0	10.5	17.5	12.0	26.5	19.5	20.5	18.5	23.5	19.0
19	12.5	8.5	12.5	10.0	19.0	13.0	26.5	19.5	21.0	18.0	23.0	17.5
20	13.5	8.0	11.5	8.5	21.0	14.0	27.0	20.0	23.5	17.0	23.0	18.0
21	14.5	9.5	14.0	7.5	21.5	15.0	27.0	20.0	22.5	19.0	22.5	17.5
22	12.5	8.5	16.5	10.0	22.0	15.5	27.5	20.0	24.0	18.0	22.0	17.0
23	10.5	6.5	18.5	11.5	21.5	16.5	28.0	20.5	24.0	18.5	22.0	16.5
24	9.5	5.0	19.0	12.5	17.5	13.5	28.5	21.0	24.5	18.0	22.0	16.5
25	7.5	6.5	16.5	11.5	19.5	12.0	29.0	21.5	25.0	18.5	21.5	16.0
26	9.5	5.0	17.0	11.5	21.0	13.5	28.5	20.5	25.0	19.5	21.0	15.5
27	13.0	6.5	16.5	11.5	22.0	14.5	28.0	21.0	23.0	18.0	20.0	15.0
28	13.5	8.0	15.5	11.5	23.0	15.0	27.5	20.5	23.0	18.0	19.5	14.5
29	10.0	8.0	14.5	11.5	23.5	16.0	26.5	20.5	23.0	16.5	19.5	14.5
30	10.5	9.0	15.5	11.5	23.0	16.5	25.0	19.0	23.0	17.0	19.5	15.0
31	---	---	17.5	12.5	---	---	25.0	18.0	22.5	16.5	---	---
MONTH	14.5	4.0	19.0	6.0	23.5	12.0	29.0	15.5	27.0	16.5	---	---

11413000 NORTH YUBA RIVER BELOW GOODYEARS BAR, CALIF.

LOCATION.--Lat 39°31'30", long 120°56'13", in NE¼SW¼ sec.11, T.19 N., R.9 E., Sierra County, Tahoe National Forest, on right bank 200 ft (61 m) downstream from St. Catherine Creek, 3.1 mi (5.0 km) southwest of Goodyears Bar, and 6.4 mi (10.3 km) southwest of Downieville.

DRAINAGE AREA.--250 mi² (648 km²).

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1949, published as North Fork Yuba River below Goodyears Bar. Monthly and yearly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 2,453 ft (747.7 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--45 years, 765 ft³/s (21.66 m³/s), 554,200 acre-ft/yr (683 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,980 ft³/s (141 m³/s) June 6 (gage height, 9.31 ft or 2.838 m); minimum daily, 156 ft³/s (4.42 m³/s) Oct. 21.

Period of record: Maximum discharge, 40,000 ft³/s (1,130 m³/s) Feb. 1, 1963 (gage height, 23.8 ft or 7.25 m, from floodmarks), from rating curve extended above 8,500 ft³/s (241 m³/s) on basis of one float measurement at 17,900 ft³/s (507 m³/s) and slope-area measurements at gage heights 19.15 ft (5.837 m) and 23.8 ft (7.25 m); minimum, 69 ft³/s (1.95 m³/s) Aug. 26, 1931.

REMARKS.--Records excellent. Several small diversions above station for irrigation and mining. See schematic diagram of Yuba River basin.

REVISIONS (WATER YEARS).--WSP 1041: 1944. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	202	168	169	278	744	899	1150	3960	1080	316	217
2	160	184	170	169	405	835	838	1310	3690	1020	309	214
3	162	180	308	166	317	800	818	1690	3670	971	302	211
4	164	178	499	185	363	735	805	1640	3660	941	294	206
5	162	177	259	178	291	738	774	1360	3820	912	288	202
6	160	176	218	332	275	788	706	1240	3990	888	282	199
7	160	189	202	505	350	1050	675	1280	3650	858	276	197
8	162	203	193	870	680	1640	655	1490	3270	811	273	194
9	169	186	186	415	1780	1390	655	1800	3070	772	267	194
10	170	181	183	306	1180	1090	668	2120	2960	741	262	210
11	165	178	182	263	743	906	667	2460	2930	708	258	218
12	162	176	192	238	898	781	693	2690	2920	673	253	204
13	162	174	243	232	2440	735	749	2930	2960	634	246	202
14	160	172	201	226	1330	692	871	3280	2960	600	243	196
15	159	170	193	226	829	654	818	3220	2940	596	243	192
16	159	169	191	223	651	670	751	2930	2760	616	240	191
17	158	166	187	221	548	620	705	3130	2560	572	237	189
18	157	188	178	229	485	687	680	3440	2120	545	296	189
19	157	178	177	237	627	1090	672	3650	1830	518	348	188
20	157	169	176	241	846	1180	683	3150	1720	491	290	187
21	156	272	178	242	651	977	780	2410	1700	467	286	181
22	159	265	178	237	559	893	889	2280	1650	443	294	178
23	163	198	166	236	509	785	893	2540	1620	422	260	177
24	164	190	160	237	502	929	1400	2960	1650	403	247	175
25	165	217	171	244	507	3360	1790	3070	1390	387	241	174
26	164	197	167	268	522	2020	1320	3010	1290	370	236	172
27	166	186	205	246	549	1450	1140	3180	1220	353	230	171
28	293	178	206	222	646	1170	1090	3280	1190	342	227	169
29	209	173	177	229	---	1000	1090	3460	1170	337	227	169
30	184	172	177	212	---	940	1130	3530	1140	334	224	167
31	215	---	168	218	---	975	---	3910	---	326	220	---
TOTAL	5262	5644	6259	8222	19761	32324	26304	79590	75460	19131	8215	5733
MEAN	170	188	202	265	706	1043	877	2567	2515	617	265	191
MAX	293	272	499	870	2440	3360	1790	3910	3990	1080	348	218
MIN	156	166	160	166	275	620	655	1150	1140	326	220	167
AC-FT	10440	11190	12410	16310	39200	64110	52170	157900	149700	37950	16290	11370

CAL YR 1974 TOTAL 405682 MEAN 1111 MAX 9100 MIN 156 AC-FT 804700
WTR YR 1975 TOTAL 291905 MEAN 800 MAX 3990 MIN 156 AC-FT 579000

Peak discharge (base, 3,200 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
3-25	0630	8.78	4,320	6-6	2130	9.31	4,980
5-18	2230	8.72	4,240				

11413100 NORTH YUBA RIVER ABOVE SLATE CREEK, NEAR STRAWBERRY VALLEY, CALIF.

LOCATION.--Lat 39°31'29", long 121°05'26", in NE¼SW¼ sec.9, T.19 N., R.8 E., Yuba County, Tahoe National Forest, on left bank 500 ft (152 m) upstream from Slate Creek, and 2.8 mi (4.5 km) southeast of Strawberry Valley.

DRAINAGE AREA.--351 mi^2 (909 km^2).

PERIOD OF RECORD.--June 1968 to current year.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 1,953.44 ft (595.409 m) above mean sea level.

AVERAGE DISCHARGE.--7 years, 1,389 ft^3/s (39.34 m^3/s), 1,006,000 acre-ft/yr (1.24 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 9,320 ft^3/s (264 m^3/s) Mar. 25 (gage height, 12.43 ft or 3.789 m); minimum daily, 180 ft^3/s (5.10 m^3/s) Oct. 19-24.

Period of record: Maximum discharge, 35,800 ft^3/s (1,010 m^3/s) Jan. 22, 1970 (gage height, 19.91 ft or 6.069 m, recorded; 20.7 ft or 6.31 m, from floodmarks); minimum daily, 138 ft^3/s (3.91 m^3/s) Sept. 29, 1968.

Flood of Dec. 22, 1964, reached a stage of 29.8 ft (9.08 m), from floodmarks (discharge, 63,400 ft^3/s or 1,800 m^3/s from slope-area measurement).

REMARKS.--Records good. Several small diversions above station for irrigation and mining. See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	185	272	210	206	414	1320	1630	2010	4800	1220	377	290
2	185	227	205	212	731	1550	1510	2260	4500	1160	374	287
3	185	215	381	208	520	1540	1460	2980	4500	1110	358	283
4	185	209	936	233	621	1370	1430	3030	4600	1060	351	280
5	185	205	417	233	488	1330	1360	2440	4840	1040	339	276
6	185	205	326	522	439	1480	1240	2220	5010	1020	332	269
7	185	215	292	950	589	1930	1180	2300	4670	987	324	263
8	185	270	270	1840	1220	3050	1120	2400	4140	942	320	262
9	189	231	254	791	3720	2720	1080	2700	3790	904	317	259
10	193	215	240	532	2360	2110	1100	3000	3630	872	311	272
11	191	214	236	432	1450	1730	1110	3200	3510	820	306	301
12	187	209	244	380	1660	1480	1160	3500	3520	782	302	279
13	187	208	336	360	5270	1360	1260	3800	3510	728	299	272
14	187	203	282	349	2770	1260	1470	4100	3510	691	296	263
15	185	199	265	342	1670	1170	1370	4000	3470	674	296	259
16	183	199	255	340	1270	1190	1250	3900	3240	712	296	255
17	182	197	249	335	1040	1090	1160	4200	2980	669	294	252
18	182	218	237	337	896	1280	1120	4500	2450	631	362	251
19	180	228	226	356	1280	2500	1100	4600	2080	604	466	251
20	180	207	222	365	1020	2570	1120	4500	1900	577	373	248
21	180	343	225	367	1310	1960	1290	4100	1880	545	352	242
22	180	460	234	366	1080	1760	1470	3400	1830	512	376	234
23	180	284	205	356	960	1520	1480	3500	1780	480	334	233
24	180	251	192	356	927	1760	2560	3700	1840	465	322	231
25	182	295	208	362	923	7160	3510	3900	1560	450	312	227
26	182	282	210	405	942	4170	2520	3800	1470	438	309	227
27	185	250	257	384	968	2830	2120	4000	1370	423	302	224
28	392	235	293	334	1140	2200	2010	4200	1340	408	297	220
29	297	222	236	344	---	1850	1970	4400	1320	400	299	220
30	226	210	226	307	---	1720	2020	4700	1280	400	296	220
31	266	---	212	319	---	1770	---	4900	---	389	291	---
TOTAL	6156	7178	8581	13223	38478	62730	46180	110240	90320	22113	10183	7650
MEAN	199	239	277	427	1374	2024	1539	3556	3011	713	328	255
MAX	392	460	936	1840	5270	7160	3510	4900	5010	1220	466	301
MIN	180	197	192	206	414	1090	1080	2010	1280	389	291	220
AC-FT	12210	14240	17020	26230	76320	124400	91600	218700	179100	43860	20200	15170

CAL YR 1974 TOTAL 556445 MEAN 1525 MAX 15500 MIN 180 AC-FT 1104000
WTR YR 1975 TOTAL 423032 MEAN 1159 MAX 7160 MIN 180 AC-FT 839100

Peak discharge (base, 4,500 ft^3/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-9	0630	10.72	5,470	4-24	2100	10.48	5,010
2-13	1030	11.22	6,480	5-19	unknown	--	unknown
3-25	0730	12.43	9,320	6-6	2300	11.00	6,000

NOTE.--No gage-height record May 7 to June 5.

11413100 NORTH YUBA RIVER ABOVE SLATE CREEK, NEAR STRAWBERRY VALLEY, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: September 1968 to July 1969, October 1974 to current year.
Sediment records: Water year 1972 (partial-record station).

EXTREMES.--Current year:
Water temperatures: Maximum, 22.0°C July 25-27; minimum, freezing point Dec. 24, 31, Jan. 1-3.
Period of record:
Water temperatures: Maximum, 22.0°C July 22, 24, 25, 28, 1969, July 25-27, 1975; minimum, freezing point Dec. 24, 31, 1974, Jan. 1-3, 1975.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	12.5	9.5	9.0	3.5	3.0	0.5	0.0	---	---	7.0	5.5
2	15.0	13.5	8.5	7.5	4.5	3.0	0.5	0.0	---	---	7.0	6.0
3	15.0	13.5	7.5	6.5	6.0	4.5	1.0	0.0	---	---	6.5	4.5
4	15.5	14.0	7.5	6.5	6.5	6.0	2.5	1.0	---	---	7.0	5.0
5	14.5	12.5	7.0	6.0	6.0	5.0	2.5	2.5	---	---	7.0	6.0
6	13.0	11.0	7.0	6.0	5.5	5.0	3.5	2.5	---	---	6.5	6.0
7	13.0	11.0	7.5	7.0	5.0	4.5	4.0	3.5	---	---	6.5	6.0
8	14.0	12.0	7.5	6.5	4.5	4.0	4.5	4.0	---	---	6.0	5.0
9	14.0	12.5	7.0	6.5	4.0	3.5	4.0	3.0	---	---	6.5	6.0
10	13.0	11.5	7.0	6.0	3.5	3.0	3.5	3.0	---	---	7.0	5.5
11	13.0	11.5	7.0	6.0	5.5	3.5	3.5	3.0	---	---	7.5	6.0
12	12.5	10.5	7.5	6.0	6.0	5.5	3.0	2.5	---	---	6.5	4.5
13	12.0	10.5	7.5	6.5	6.0	5.0	3.0	2.5	---	---	6.0	4.0
14	12.0	10.5	8.0	6.5	5.5	5.0	3.0	2.5	---	---	6.5	3.5
15	12.0	10.5	8.0	7.0	5.5	5.0	3.5	2.5	---	---	6.5	4.5
16	12.0	10.5	7.5	6.5	5.0	4.5	3.5	3.0	---	---	5.0	3.5
17	12.0	10.5	7.5	7.0	4.5	4.0	---	---	---	---	5.0	4.5
18	12.0	10.5	8.0	7.0	4.0	3.0	---	---	---	---	6.0	4.5
19	12.0	10.5	7.5	6.5	3.5	3.0	---	---	---	---	6.0	5.5
20	12.0	10.5	6.5	5.5	4.0	3.0	---	---	---	---	7.0	5.5
21	11.5	10.0	7.5	6.0	4.5	3.5	---	---	---	---	6.0	1.5
22	10.5	9.0	7.5	6.0	4.5	2.5	---	---	---	---	3.5	2.0
23	10.0	9.0	6.0	5.0	2.5	1.0	---	---	---	---	5.5	3.5
24	10.0	8.5	5.0	4.5	1.0	0.0	---	---	---	---	5.5	5.0
25	10.5	9.0	6.0	5.0	1.5	0.5	---	---	---	---	6.5	5.0
26	11.0	9.5	5.5	4.5	2.5	1.0	---	---	---	---	6.0	4.0
27	11.0	10.0	4.5	4.0	2.5	0.5	---	---	7.5	5.5	6.0	4.0
28	11.0	9.5	4.5	3.5	2.0	1.5	---	---	7.5	5.5	5.5	3.0
29	9.5	9.0	4.0	3.5	1.5	0.5	---	---	---	---	7.0	3.5
30	9.5	8.5	3.5	3.0	1.5	1.0	---	---	---	---	8.0	5.0
31	9.0	9.0	---	---	1.0	0.0	---	---	---	---	7.5	6.0
MONTH	15.5	8.5	9.5	3.0	6.5	0.0	---	---	---	---	8.0	1.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	4.5	9.5	6.0	10.0	6.5	14.5	11.0	20.0	15.5	18.0	14.5
2	7.0	4.5	10.0	6.5	10.0	6.5	14.5	11.0	21.0	16.5	18.0	14.5
3	6.5	5.5	8.5	6.0	11.0	6.5	15.0	11.5	21.0	16.5	18.5	15.0
4	5.0	2.5	6.0	5.0	11.0	6.5	15.5	12.5	21.0	17.0	19.0	15.0
5	3.5	2.0	7.5	4.5	12.0	7.0	16.5	13.0	20.5	17.0	19.0	16.0
6	6.0	3.0	9.5	5.5	11.5	7.0	17.0	13.5	20.5	17.0	19.5	16.0
7	5.0	3.0	10.0	6.0	11.0	6.5	17.5	14.0	19.5	15.5	19.5	16.0
8	6.0	3.5	10.5	6.5	11.0	7.0	17.5	14.0	20.0	16.0	20.0	16.5
9	7.5	4.5	10.5	6.5	11.5	7.0	18.0	14.5	20.5	16.5	20.0	17.0
10	7.5	5.0	10.0	6.0	11.5	7.0	17.0	15.0	20.5	16.5	18.5	17.0
11	8.0	5.0	10.5	6.0	11.5	8.0	19.0	14.5	20.5	16.5	18.5	15.5
12	9.0	5.5	10.5	5.5	12.0	8.0	19.0	15.0	20.5	16.5	19.5	16.0
13	9.0	6.0	10.5	6.0	12.5	8.5	19.0	15.0	20.5	16.5	19.0	16.5
14	8.5	6.0	10.0	6.0	13.0	8.5	19.0	15.5	20.0	16.5	19.0	16.0
15	6.0	4.5	9.0	5.5	13.0	9.0	17.0	15.0	20.0	16.5	18.5	16.0
16	6.5	4.5	10.5	5.5	13.0	9.0	18.5	14.5	20.5	16.5	18.5	15.5
17	7.5	4.5	10.5	6.0	12.5	10.0	18.5	15.5	19.0	16.5	18.5	15.5
18	7.5	5.5	11.0	6.0	10.5	8.0	19.5	15.5	18.0	16.0	19.0	16.5
19	8.5	6.5	9.0	6.0	11.5	9.0	20.0	16.0	16.0	15.0	19.0	16.5
20	9.5	6.0	7.0	5.0	13.0	9.5	20.0	16.5	18.5	14.0	19.0	16.5
21	9.5	7.0	9.5	5.0	13.5	10.5	20.5	16.5	18.0	16.0	18.5	16.5
22	8.5	6.0	10.0	6.0	13.0	10.5	20.5	16.5	18.5	14.5	17.5	15.5
23	8.0	6.5	11.0	6.5	13.0	11.0	20.5	17.0	19.5	15.5	17.5	15.0
24	7.0	5.5	10.5	6.5	12.0	8.5	21.5	17.5	19.5	16.0	17.5	15.0
25	6.0	5.0	10.5	5.5	11.5	7.0	22.0	18.0	20.0	16.5	17.0	15.0
26	7.0	4.5	10.5	6.0	13.0	9.5	22.0	18.0	20.0	17.0	16.5	14.5
27	9.0	5.0	10.5	6.0	13.5	10.5	22.0	18.0	19.0	16.0	16.0	14.0
28	9.0	6.0	10.5	6.0	14.0	11.0	21.5	17.5	19.0	16.0	15.5	13.5
29	9.5	6.0	10.5	6.0	14.5	11.5	21.0	17.5	18.5	15.0	15.5	13.0
30	8.5	6.5	11.0	6.0	14.5	11.5	19.5	16.5	18.5	15.0	15.5	13.5
31	---	---	11.5	6.5	---	---	19.5	15.5	18.0	14.5	---	---
MONTH	9.5	2.0	11.5	4.5	14.5	6.5	22.0	11.0	21.0	14.0	20.0	13.0

SACRAMENTO RIVER BASIN

11413250 SLATE CREEK TUNNEL NEAR STRAWBERRY VALLEY, CALIF.

LOCATION.--Lat 39°36'57", long 121°03'03", in SE¼SW¼ sec.2, T.20 N., R.8 E., Plumas County, Plumas National Forest, on right bank 30 ft (9 m) upstream from diversion dam on Slate Creek, 0.3 mi (0.5 km) upstream from Feney Ravine, and 4.5 mi (7.2 km) northeast of town of Strawberry Valley.

PERIOD OF RECORD.--October 1966 to current year. Records of daily discharge for December 1961 to September 1966 are in files of Geological Survey. Monthly diversion used to adjust Slate Creek below diversion dam near Strawberry Valley since February 1962.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

AVERAGE DISCHARGE.--9 years, 114 ft³/s (3.228 m³/s), 82,590 acre-ft/yr (102 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 863 ft³/s (24.4 m³/s) Apr. 6, 1963; no flow many days in each year.

REMARKS.--Records good. Tunnel diverts water from Slate Creek to Sly Creek Reservoir (see sta 11395400) for power development. See schematic diagrams of South Fork Feather and Yuba River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	13	7.5	9.2	24	260	319	0	0	84	16	6.3
2	.35	6.9	9.2	9.2	37	334	293	0	216	77	15	6.3
3	.70	5.4	115	9.2	39	350	279	0	544	73	15	6.0
4	.70	4.5	186	11	37	305	261	0	544	69	14	5.7
5	.35	4.2	49	11	39	293	237	0	393	65	14	4.8
6	.23	3.9	33	39	40	345	206	0	275	62	13	4.5
7	.23	7.8	26	156	51	479	189	0	274	59	13	3.9
8	.35	16	22	386	149	686	90	0	274	55	12	3.4
9	1.4	10	18	132	383	597	0	0	273	52	12	2.5
10	2.1	7.5	16	78	293	430	0	0	518	49	11	5.4
11	1.4	6.6	16	58	206	355	0	0	775	46	10	7.8
12	.50	6.0	18	48	181	300	0	0	725	44	10	5.1
13	.28	5.4	29	44	362	273	0	442	675	41	9.0	4.2
14	.23	5.1	20	43	471	238	0	841	623	38	8.0	3.6
15	.18	4.5	18	42	298	218	0	835	509	40	8.0	2.8
16	.18	3.9	17	41	230	200	0	831	0	42	7.0	2.6
17	.23	3.9	16	40	181	175	0	832	139	38	7.0	2.1
18	.18	11	13	43	154	195	0	836	250	36	25	2.1
19	.18	9.6	13	47	221	522	0	836	214	33	40	2.1
20	.18	6.6	13	49	331	537	0	820	190	30	34	1.8
21	.15	68	14	51	237	398	0	812	178	29	28	.90
22	.15	49	13	51	232	331	189	358	165	27	23	.35
23	.18	21	5.7	50	165	268	306	0	153	26	17	.23
24	.28	15	6.9	52	162	324	569	0	163	24	11	.18
25	.35	24	13	56	163	833	795	0	137	23	9.6	.15
26	.50	20	11	72	177	775	568	0	123	21	8.9	.10
27	1.4	15	8.9	58	182	593	453	0	111	20	8.2	.08
28	31	13	9.6	48	225	425	434	0	103	19	7.8	.06
29	14	10	12	47	---	360	176	0	97	18	7.5	.06
30	6.3	9.2	12	39	---	346	0	0	91	17	7.2	.03
31	17	---	10	38	---	358	---	0	---	17	6.6	---
TOTAL	81.61	386.0	770.8	1857.6	5270	12103	5364	7443	8732	1274	427.8	85.14
MEAN	2.63	12.9	24.9	59.9	188	390	179	240	291	41.1	13.8	2.84
MAX	31	68	186	386	471	833	795	841	775	84	40	7.8
MIN	.15	3.9	5.7	9.2	24	175	0	0	0	17	6.6	.03
AC-FT	162	766	1530	3680	10450	24010	10640	14760	17320	2530	849	169

CAL YR 1974 TOTAL 13137.81 MEAN 36.0 MAX 848 MIN 0 AC-FT 26060
WTR YR 1975 TOTAL 43794.95 MEAN 120 MAX 841 MIN 0 AC-FT 86870

11413300 SLATE CREEK BELOW DIVERSION DAM, NEAR STRAWBERRY VALLEY, CALIF.

LOCATION.--Lat 39°36'52", long 121°03'04", in SE¼SW¼ sec.2, T.20 N., R.8 E., Plumas County, Plumas National Forest, on right bank 300 ft (91 m) downstream from diversion dam, 0.2 mi (0.3 km) upstream from Feney Ravine, and 4.5 mi (7.2 km) northeast of town of Strawberry Valley.

DRAINAGE AREA.--49.4 mi² (127.9 km²).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,570 ft (1,088 m), from topographic map.

AVERAGE DISCHARGE (adjusted for diversion to Slate Creek tunnel).--15 years, 222 ft³/s (6.287 m³/s), 160,800 acre-ft/yr (198 hm³/yr).

EXTREMES (Creek only).--Current year: Maximum discharge, 1,190 ft³/s (33.7 m³/s) Feb. 13 (gage height, 6.37 ft or 1.942 m); minimum daily, 0.86 ft³/s (0.024 m³/s) Feb. 18.

Period of record: Maximum discharge, 13,100 ft³/s (371 m³/s) Dec. 22, 1964 (gage height, 16.42 ft or 5.005 m), from rating curve extended above 5,500 ft³/s (156 m³/s) on basis of computed flow over dam at gage heights 12.75 ft (3.886 m) and 15.90 ft (4.846 m); minimum, 0.3 ft³/s (0.008 m³/s) Mar. 4, 5, 1962.

(Combined flow).--Current year: Maximum discharge, 1,870 ft³/s (53.0 m³/s) Feb. 13; minimum daily, 8.0 ft³/s (0.23 m³/s) Oct. 21, 22.

Period of record: Maximum discharge, 13,900 ft³/s (394 m³/s) Dec. 22, 1964; minimum daily, 2.3 ft³/s (0.065 m³/s) Nov. 23, 1961.

REMARKS.--Records good. Slate Creek tunnel (see sta 11413250) diverts at diversion dam, 300 ft (91 m) upstream, up to 900 ft³/s (25.5 m³/s) from Slate Creek Reservoir, capacity, 223 acre-ft (275,000 m³) to Sly Creek Reservoir (see sta 11395400). Diversion began in February 1962. See schematic diagrams of South Fork Feather and Yuba River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	8.3	7.9	8.6	12	9.8	7.0	464	932	10	10	10
2	7.9	8.3	7.9	8.6	9.4	9.9	6.7	516	666	10	10	10
3	7.9	8.3	8.4	9.0	9.0	9.7	6.7	697	232	10	10	10
4	7.9	8.3	8.1	9.0	9.1	9.7	6.7	699	222	10	10	10
5	7.9	8.3	7.9	9.0	9.1	9.7	6.7	540	338	10	10	10
6	7.9	8.3	7.9	9.3	9.0	9.9	6.7	489	429	10	11	10
7	7.9	8.3	7.9	9.4	9.0	10	6.7	515	332	10	10	10
8	7.9	8.3	7.9	9.7	9.3	11	81	590	252	10	10	9.7
9	7.9	8.3	8.3	9.1	575	11	173	678	197	10	11	10
10	7.9	8.3	8.3	9.0	232	25	173	762	94	10	11	10
11	7.9	8.3	8.3	9.0	60	7.4	171	855	12	10	11	10
12	7.9	8.3	8.3	9.0	57	7.3	185	927	11	10	11	9.7
13	7.9	8.3	8.3	9.0	286	7.0	217	637	11	11	11	9.7
14	7.9	8.3	8.3	9.0	1.4	7.0	263	446	11	11	11	9.7
15	7.9	8.3	8.3	9.0	1.1	6.9	232	398	30	11	11	9.7
16	7.9	8.3	8.3	9.0	.96	7.0	207	295	339	11	11	9.7
17	7.9	8.3	8.3	9.0	.91	6.7	192	343	163	11	11	9.7
18	7.9	8.3	8.3	9.0	.86	7.0	191	451	10	10	11	9.7
19	8.2	8.3	8.3	9.0	1.2	7.6	196	500	10	11	11	9.7
20	7.9	7.9	8.3	9.0	1.3	7.4	214	363	10	11	11	9.4
21	7.9	8.2	8.6	9.0	1.1	7.3	281	137	10	11	11	9.4
22	7.9	7.9	8.6	9.0	.99	7.0	148	414	10	11	10	9.4
23	7.9	7.9	8.6	9.0	.92	7.0	11	732	10	11	10	9.4
24	7.9	7.9	8.6	9.0	.91	7.3	192	825	10	11	10	9.4
25	7.9	8.0	8.6	9.0	.91	597	145	839	10	10	10	9.4
26	7.9	7.9	8.6	9.0	.91	77	11	807	10	10	10	9.4
27	8.0	7.9	8.6	9.0	.91	7.4	11	839	10	10	10	9.4
28	8.3	7.9	8.6	9.0	5.3	8.6	11	863	10	10	10	9.4
29	8.3	7.9	8.6	9.0	---	7.3	254	901	10	10	10	9.4
30	8.3	7.9	8.6	9.0	---	7.0	464	897	10	10	10	9.4
31	8.3	---	8.6	9.4	---	7.0	---	940	---	10	10	---
TOTAL	246.9	245.0	258.1	280.1	1313.58	926.9	4068.2	19339	4401	321	324	290.7
MEAN	7.96	8.17	8.33	9.04	46.9	29.9	136	624	147	10.4	10.5	9.69
MAX	8.3	8.3	8.6	9.7	575	597	464	940	932	11	11	10
MIN	7.9	7.9	7.9	8.6	.86	6.7	6.7	137	10	10	10	9.4
AC-FT	490	486	512	556	2610	1840	8070	38360	8730	637	643	577
MEAN a	10.6	21.0	33.2	69.0	235	420	314	864	438	51.6	24.2	12.5
AC-FT a	652	1,250	2,040	4,240	13,060	25,850	18,710	53,120	26,050	3,170	1,490	746

CAL YR 1974 TOTAL 83121.70 MEAN 228 MAX 4650 MIN 7.9 AC-FT 164900 MEAN a 264 AC-FT a 190,900
WTR YR 1975 TOTAL 32014.48 MEAN 87.7 MAX 940 MIN .86 AC-FT 63500 MEAN a 208 AC-FT a 150,400

a Adjusted for diversions to Slate Creek tunnel.

11413510 NEW COLGATE POWERPLANT NEAR FRENCH CORRAL, CALIF.

LOCATION.--Lat 39°19'51", long 121°11'23", in NE¼SE¼ sec.16, T.17 N., R.7 E., Yuba County, at powerplant on right bank of Yuba River, 0.3 mi (0.5 km) upstream from Dobbins Creek, and 2.3 mi (3.7 km) northwest of French Corral.

PERIOD OF RECORD.--October 1966 to current year. Records of daily discharge for October 1960 to September 1966 are available in files of Geological Survey. Prior to October 1969, published as "Colgate powerplant."

GAGE.--Recorded output from powerplant turbines.

AVERAGE DISCHARGE.--9 years, 1,300 ft³/s (36.8 m³/s), 941,800 acre-ft/yr (1.16 km³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 4,200 ft³/s (119 m³/s) June 2, 1971; no flow for several days in each year.

REMARKS.--Water is diverted from North Yuba River at New Bullards Bar Dam (see sta 11413515). Colgate powerplant was rebuilt during the 1970 water year with an increased capacity. Browns Valley ditch diverted up to 10 ft³/s (0.28 m³/s) at times from the head of the penstock for use in irrigation. This diversion discontinued Oct. 31, 1973. See schematic diagram of Yuba River basin.

COOPERATION.--Records collected by Yuba County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	3360	3150	260	195	2260	1590	1020	1960	2560	2780
2		0	3340	3150	0	435	3170	1820	2700	1880	2970	3240
3		0	3400	3110	95	1770	3310	994	3630	2130	1980	2580
4		0	3350	3140	83	2750	3340	91	3610	869	2850	2860
5		0	3250	3110	0	2420	3260	516	3640	1750	3310	2610
6		0	3410	3110	0	813	2510	108	3620	2390	2330	2920
7		0	3320	3120	0	596	2930	176	3620	1960	3430	2780
8		0	3360	3110	0	192	2800	541	3630	1320	2420	2960
9		0	3330	3080	0	0	3260	628	3640	1080	2460	2780
10		0	3260	3090	0	121	3340	81	3620	2520	3080	2760
11		0	3300	3090	0	67	3320	0	3640	2250	2890	2950
12		0	3270	3070	347	667	3360	1370	3140	1150	2990	2570
13		0	3270	3080	17	1760	3020	347	3150	1220	2880	2990
14		0	3280	2200	0	1370	3090	851	3370	1840	3010	1400
15		0	3270	1950	0	1620	2710	961	3330	1970	3130	3430
16		44	3250	2290	26	1380	3090	448	3260	2230	2290	3270
17		3160	3260	1700	0	1500	3330	269	2870	1650	3120	2550
18		3320	3250	1000	0	1500	2980	134	3500	1690	2330	2740
19		3410	3240	1130	0	1480	2470	1530	2700	1510	3010	2970
20		3420	3230	1790	1010	1640	3000	1860	2930	1400	2880	2380
21		3420	3260	640	1990	1660	2950	2190	3010	1720	2490	1600
22		3420	3200	1540	1270	771	3230	2360	2950	3500	3200	2840
23		3430	3210	1810	1820	1080	2820	2340	1890	2940	2480	3150
24		3380	3210	1870	1460	1830	3010	406	1420	2740	3120	2770
25		3390	3200	1250	1720	142	2010	0	2350	2700	2520	3020
26		3390	3170	1470	1590	0	726	0	2820	3200	2700	2820
27		3390	3200	1490	1870	0	528	1110	2360	1690	3070	2880
28		3360	3160	768	1460	1760	1720	2510	1100	3100	2630	3210
29		3360	3170	1030	---	3100	2040	2870	872	2980	2980	2360
30		3360	3160	987	---	1390	2070	648	1310	2640	3040	2410
31		---	3170	1080	---	2420	---	3210	---	3190	2330	---
TOTAL	0	47254	101110	66405	15018	36409	81634	31899	84702	65169	86480	82520
MEAN	0	1575	3262	2142	536	1174	2721	1029	2823	2102	2790	2751
MAX	0	3430	3410	3150	1990	3100	3340	3210	3640	3500	3430	3430
MIN	0	0	3160	640	0	0	528	0	872	869	1980	1400
AC-FT	0	93730	200600	131700	29790	72220	161900	63270	168000	129300	171500	163700

CAL YR 1974 TOTAL 860705.00 MEAN 2358 MAX 3500 MIN 0 AC-FT 1707000
WTR YR 1975 TOTAL 698600.00 MEAN 1914 MAX 3640 MIN 0 AC-FT 1386000

11413515 NEW BULLARDS BAR RESERVOIR NEAR NORTH SAN JUAN, CALIF.

LOCATION.--Lat 39°23'34", long 121°08'25", in SE¼NW¼ sec.25, T.18 N., R.7 E., Yuba County, Plumas National Forest, in center of dam on North Yuba River, 2.2 mi (3.5 km) upstream from Middle Yuba River, and 2.4 mi (3.9 km) northwest of North San Juan.

DRAINAGE AREA.--489 mi² (1,267 km²).

PERIOD OF RECORD.--January 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Yuba County Water Agency).

EXTREMES.--Current year: Maximum contents, 964,757 acre-ft (1.19 km³) June 30 (elevation, 1,955.72 ft or 596.103 m); minimum, 363,885 acre-ft (449 hm³) Jan. 31 (elevation, 1,790.10 ft or 545.622 m).
Period of record: Maximum contents, 964,757 acre-ft (1.19 km³) June 30, 1975 (elevation, 1,955.72 ft or 596.103 m); minimum since reservoir first filled, 327,322 acre-ft (404 hm³) Jan. 21, 1972 (elevation, 1,775.40 ft or 541.142 m).

REMARKS.--Reservoir is formed by concrete-arch dam with a concrete-sidehill spillway. Spill controlled by three 30-ft (9.1-m) by 53-ft (16.2-m) radial gates. Storage began in January 1969. Usable capacity, 727,380 acre-ft (897 hm³) between elevations 1,732.0 ft (527.91 m), minimum power pool and 1,955.0 ft (595.88 m), normal gross pool. Dead storage, 233,920 acre-ft (288 hm³). Total capacity at normal gross pool, 1,955.0 ft (595.88 m), 961,300 acre-ft (1.19 km³). Water is released to Colgate powerplant through a tunnel at the dam. Water is diverted into the reservoir from Middle Yuba River via Lohman Ridge tunnel to Oregon Creek then via Camptonville tunnel. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Yuba River basin.

COOPERATION.--Records collected by Yuba County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

1,600	64,900	1,750	270,110
1,630	90,570	1,800	389,980
1,660	122,990	1,850	539,750
1,690	162,980	1,900	721,130
1,720	211,770	1,960	985,471

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	737099	728807	632490	453644	365562	480656	624390	621609	902666	964180	895801	755338
2	737219	728528	626310	448181	369191	484813	623305	624861	910259	963700	891062	749959
3	737904	728089	620527	442029	371146	486111	621682	632490	915300	962702	888154	745778
4	738065	727690	616930	436506	374022	484813	620527	642015	919849	964084	883576	740724
5	738306	727093	612274	430396	374810	484350	619087	649031	924880	963220	878113	736295
6	738790	726535	606395	426733	377442	487597	618367	656058	929825	961398	874515	731324
7	739193	726136	600552	424027	379822	492571	616930	662646	934858	960583	868907	726693
8	739717	725897	594569	424311	384610	503243	615280	669088	938200	960439	864938	721526
9	739918	725380	588624	420625	398278	512777	612845	677398	940378	960822	861454	717962
10	740724	724703	582024	415835	407467	519397	610417	686847	942260	958429	855993	712637
11	740724	724306	576846	410606	413005	525439	607995	697976	944106	956517	851347	707728
12	740402	723630	570671	405538	419495	529050	605791	707728	946806	956278	846500	703036
13	739515	722994	564536	400302	435493	530092	604443	720021	959608	956039	841678	697976
14	738306	722320	559117	396614	448799	531532	603806	731084	951843	954034	836858	696036
15	737099	722201	553262	393571	454534	532676	603309	742339	954225	952463	831717	689466
16	735894	720733	547711	389653	458859	534481	601824	753297	956804	950321	827941	683702
17	735291	715198	541401	387188	462320	535235	599693	764872	959626	948895	822534	679495
18	734689	710081	535466	385947	465476	537276	597556	776775	959769	946996	819086	674924
19	733887	703426	529898	384076	470432	543389	596465	788058	960535	945949	814789	669239
20	733366	697208	523719	380617	474993	549112	594569	796986	960535	944153	810508	665466
21	732685	692166	517586	381679	476152	553597	593167	801566	960343	942260	806680	663209
22	731884	685812	511668	379398	477252	558442	591941	805816	959961	937541	801566	658336
23	731324	680258	505141	376598	476274	561755	590962	811363	961302	932885	797329	652185
24	730684	673785	499775	373760	477138	565692	592816	821671	964180	929180	792263	646996
25	729885	668672	493828	372189	476672	587927	599493	834677	964180	925388	788142	641280
26	729166	662947	487967	370058	476519	603380	605862	846939	962501	920268	783030	636802
27	729286	656842	482378	367762	476030	613346	611026	856081	961589	918129	778357	631142
28	729485	650885	476764	367503	476672	617721	613704	863325	962644	913263	773867	625223
29	729246	644447	471342	366208	---	618367	615695	870922	963940	908645	769104	621970
30	728807	638341	465295	365433	---	621970	617649	882174	964757	904640	763743	617074
31	728767	---	458999	363885	---	623197	---	895801	---	899549	759841	---
MAX	740724	728807	632490	453644	477252	623197	624390	895801	964757	964180	895801	755338
MIN	728767	638341	458999	363885	365562	480656	590962	621609	902666	899549	759841	617074
(a)	1,901.92	1,878.30	1,824.30	1,790.10	1,830.15	1,874.14	1,872.60	1,941.00	1,955.72	1,941.82	1,909.60	1,872.44
(b)	-7,769	-90,426	-179,342	-95,114	+112,787	+146,525	-5,548	+287,152	+68,956	-65,208	-139,708	-142,767

CAL YR 1974 b -234,095
WTR YR 1975 b -119,462

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11413520 NORTH YUBA RIVER BELOW NEW BULLARDS BAR DAM, NEAR NORTH SAN JUAN, CALIF.

LOCATION.--Lat 39°22'48", long 121°08'19", in SW¼NE¼ sec.36, T.18 N., R.7 E., Yuba County, Plumas National Forest, on right bank 1.1 mi (1.8 km) downstream from New Bullards Bar Dam, and 2 mi (3 km) northwest of North San Juan.

DRAINAGE AREA.--490 mi² (1,269 km²).

PERIOD OF RECORD.--August 1966 to current year.

GAGE.--Water-stage recorder and crest-stage gages. Altitude of gage is 1,280 ft (390 m), from topographic map.

AVERAGE DISCHARGE.--7 years (1969-75, since construction of Bullards Bar Dam), 398 ft³/s (11.27 m³/s), 288,400 acre-ft/yr (356 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 785 ft³/s (22.2 m³/s) Oct. 14 (gage height, 8.53 ft or 2.600 m); minimum daily, 5.5 ft³/s (0.16 m³s) Sept. 18.

Period of record: Maximum discharge, 56,200 ft³/s (1,590 m³/s) Jan. 22, 1970 (gage height, 35.29 ft or 10.756 m), from rating curve extended above 40,000 ft³/s (1,130 m³/s) on basis of computation of flow over old Colgate Dam; minimum daily, 0.42 ft³/s (0.012 m³/s) Nov. 5, 1966.

Flood of Dec. 22, 1964, reached a stage of 49.8 ft (15.18 m), from floodmarks (discharge, 91,000 ft³/s or 2,580 m³/s, from computation of flow over old Colgate Dam).

REMARKS.--Records fair. Flow regulated by New Bullards Bar Reservoir since 1969 (see sta 11413515). Colgate powerplant (see sta 11413510) diverts from New Bullards Bar Dam 1.1 mi (1.8 km) upstream. Water is diverted out of basin through Slate Creek tunnel (see sta 11413250). See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	440	9.5	6.1	11	6.7	7.7	6.9	9.3	11	8.4	6.0
2	7.9	453	9.5	6.2	13	6.9	7.7	6.7	9.4	11	7.2	6.0
3	7.9	465	9.5	6.4	10	6.7	7.7	7.3	9.7	10	6.8	6.0
4	7.9	496	8.8	6.6	12	6.7	9.0	7.5	9.8	10	6.6	6.0
5	8.0	543	8.2	6.6	8.7	6.7	10	7.6	9.9	10	6.4	6.0
6	8.0	571	8.0	10	7.8	7.1	9.8	7.9	9.9	10	6.2	5.9
7	8.0	561	7.8	11	7.6	7.7	9.0	7.7	10	10	6.2	5.8
8	8.0	544	7.5	11	10	10	8.8	7.7	10	10	6.2	5.8
9	8.0	557	7.3	6.6	14	9.5	8.4	7.7	10	10	6.2	5.7
10	7.9	556	6.8	5.8	9.8	8.3	8.0	7.5	10	10	6.2	5.7
11	88	570	6.8	5.8	7.8	7.5	7.8	7.5	10	10	6.2	5.7
12	498	605	6.8	5.8	10	7.3	7.5	7.7	10	10	6.2	5.7
13	662	513	6.8	6.0	21	7.3	7.3	7.5	10	10	6.2	5.7
14	773	385	6.8	6.0	11	7.3	7.1	7.5	10	10	6.2	5.7
15	765	376	6.8	6.1	8.6	7.3	7.3	7.5	10	10	6.2	5.6
16	767	328	6.8	6.2	7.8	8.8	7.1	7.7	10	10	6.0	5.6
17	572	20	6.8	6.3	7.4	7.9	6.9	7.9	10	10	6.0	5.6
18	511	14	6.8	6.5	7.2	9.2	7.1	8.1	11	10	6.6	5.5
19	546	12	6.8	6.6	9.4	11	6.9	8.1	11	10	6.6	6.5
20	568	12	6.4	6.7	9.3	10	6.7	8.3	11	10	6.4	6.9
21	591	12	6.4	6.8	7.7	11	6.7	8.5	11	10	6.0	6.9
22	564	11	6.4	6.8	7.2	12	6.7	8.3	11	10	6.2	6.9
23	536	11	6.4	6.8	7.0	10	6.9	8.1	10	10	6.0	6.8
24	558	11	6.4	6.8	6.9	15	8.8	8.3	11	9.0	6.0	6.7
25	552	11	6.4	6.8	6.8	26	7.7	8.5	11	8.5	5.9	6.7
26	536	10	6.4	7.0	6.7	13	7.1	8.5	11	8.5	5.9	6.7
27	541	10	6.7	6.8	6.5	10	6.9	8.5	11	8.3	6.0	6.7
28	536	10	7.4	6.8	6.7	9.2	6.7	8.8	11	8.3	6.0	7.0
29	540	9.9	6.2	6.9	---	8.5	6.7	8.7	11	8.2	6.0	7.0
30	535	9.7	6.2	6.9	---	8.3	6.9	9.0	11	8.1	6.0	6.9
31	562	---	6.0	7.4	---	7.9	---	9.2	---	8.1	6.0	---
TOTAL	11820.4	8126.6	221.4	214.1	258.9	290.8	228.9	246.7	310.0	299.0	195.0	185.7
MEAN	381	271	7.14	6.91	9.25	9.38	7.63	7.96	10.3	9.65	6.29	6.19
MAX	773	605	9.5	11	21	26	10	9.2	11	11	8.4	7.0
MIN	7.8	9.7	6.0	5.8	6.5	6.7	6.7	6.7	9.3	8.1	5.9	5.5
AC-FT	23450	16120	439	425	514	577	454	489	615	593	387	368

CAL YR 1974 TOTAL 196610.0 MEAN 539 MAX 25600 MIN 1.3 AC-FT 390000
WTR YR 1975 TOTAL 22397.5 MEAN 61.4 MAX 773 MIN 5.5 AC-FT 44430

11413520 NORTH YUBA RIVER BELOW NEW BULLARDS BAR DAM, NEAR NORTH SAN JUAN, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: October 1966 to September 1969, July 1971 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 20.0°C July 25; minimum, 4.0°C Jan. 1-3.
Period of record:
Water temperatures: Maximum (1966-69, 1971 to current year), 25.0°C July 7, 9, 21, 1968; minimum, 2.0°C on many days in 1967 and 1968.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	12.0	6.5	6.5	7.0	6.5	5.0	4.0	5.5	4.5	10.5	10.0
2	13.5	12.5	6.5	6.5	7.0	7.0	4.5	4.0	6.0	5.5	11.0	10.0
3	14.5	12.5	6.5	6.5	8.0	7.0	4.5	4.0	6.0	5.5	10.5	9.5
4	14.5	12.5	6.5	6.5	8.0	7.5	5.5	4.5	6.5	6.0	10.5	9.5
5	13.5	12.0	6.5	6.5	8.0	7.0	5.0	5.0	6.5	6.0	10.5	10.0
6	13.5	11.5	6.5	6.5	7.5	7.0	6.0	5.0	6.5	6.0	10.0	10.0
7	13.5	11.5	6.5	6.5	7.5	7.0	6.5	6.0	---	---	10.0	10.0
8	13.5	12.5	6.5	6.5	7.0	6.5	7.0	6.5	---	---	10.0	10.0
9	13.5	12.0	6.5	6.5	7.0	6.0	6.5	5.5	---	---	10.0	8.5
10	13.5	11.5	7.0	6.5	6.5	6.0	6.5	6.0	---	---	10.5	8.5
11	13.5	9.0	7.0	6.5	7.0	6.5	6.5	6.0	---	---	9.5	9.0
12	8.5	7.0	7.0	6.5	7.0	6.5	6.5	5.5	---	---	10.0	8.5
13	7.0	6.5	7.0	6.5	7.0	6.5	6.5	5.5	---	---	9.0	8.5
14	6.5	6.5	7.0	6.5	7.0	6.5	6.5	5.5	---	---	9.5	9.0
15	6.5	6.5	7.0	6.5	7.0	6.5	6.5	5.5	---	---	9.5	9.0
16	6.5	6.5	7.0	6.5	7.0	6.5	6.5	6.0	---	---	10.0	9.0
17	6.5	6.5	7.5	6.5	7.0	6.5	6.5	6.0	---	---	9.0	8.5
18	6.5	6.5	8.5	7.0	6.5	6.0	7.0	6.0	---	---	9.0	8.5
19	7.0	6.5	8.0	7.0	6.5	6.0	7.0	6.0	---	---	9.5	8.5
20	6.5	6.5	8.5	7.0	6.5	6.0	7.0	6.5	---	---	10.0	9.0
21	6.5	6.0	8.5	8.0	6.5	6.0	7.5	6.5	---	---	10.5	9.0
22	6.5	6.5	8.5	7.5	6.0	5.5	7.5	6.5	---	---	10.5	9.0
23	6.5	6.5	8.0	7.0	5.5	5.0	7.5	6.5	---	---	10.5	8.5
24	6.5	6.5	8.0	7.0	5.0	4.5	7.5	6.5	---	---	10.0	8.5
25	6.5	6.0	8.5	7.5	5.0	4.5	7.5	7.0	---	---	11.0	8.5
26	6.5	6.0	8.0	7.0	5.0	4.5	8.0	7.0	10.0	9.5	12.0	9.0
27	6.5	6.0	8.0	7.0	5.5	5.0	7.0	6.0	10.5	9.5	11.5	9.0
28	6.5	6.0	7.5	7.0	5.5	5.0	6.0	5.5	11.0	9.5	11.0	8.5
29	6.5	6.5	7.5	6.5	5.0	4.5	6.5	5.5	---	---	11.0	9.0
30	6.5	6.5	7.5	6.5	5.5	4.5	6.0	5.0	---	---	10.0	9.0
31	6.5	6.5	---	---	5.0	4.5	5.5	4.5	---	---	9.0	8.0
MONTH	14.5	6.0	8.5	6.5	8.0	4.5	8.0	4.0	---	---	12.0	8.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	8.0	14.0	11.0	17.5	15.0	15.0	12.0	17.5	14.0	16.0	13.5
2	9.5	8.0	14.0	11.5	17.0	14.5	15.5	12.0	17.5	14.5	16.0	13.5
3	8.0	7.5	13.5	12.0	18.0	14.0	15.5	12.0	18.0	14.5	16.0	13.5
4	9.5	8.0	12.0	10.5	18.0	14.5	15.0	12.0	18.0	15.0	16.5	14.0
5	11.0	8.0	12.5	10.0	18.0	14.5	15.5	12.0	18.0	15.0	16.5	14.0
6	11.5	8.0	13.5	10.5	18.0	14.5	16.0	12.5	17.5	15.0	16.5	14.0
7	9.0	8.5	14.0	11.0	17.5	14.5	16.0	12.5	17.5	14.5	17.0	14.5
8	---	---	14.5	11.5	17.5	14.5	16.5	12.5	17.5	14.5	17.0	14.5
9	---	---	14.5	12.0	17.5	14.0	16.5	13.0	17.5	14.5	17.0	15.0
10	---	---	14.5	12.5	17.5	14.0	15.5	13.5	17.5	15.0	16.0	15.0
11	11.0	9.0	16.0	13.0	17.0	14.0	17.0	13.5	17.5	15.0	16.0	14.0
12	11.5	9.0	16.5	13.0	17.5	14.0	17.0	13.5	18.0	15.0	16.5	14.0
13	12.0	9.5	17.0	13.5	17.5	14.0	17.0	13.5	17.5	15.0	16.5	14.5
14	11.5	10.0	17.0	14.0	18.0	14.5	17.0	13.5	17.0	15.0	16.5	14.0
15	10.5	9.0	16.0	14.0	18.0	14.5	15.0	13.5	17.0	15.0	16.0	14.0
16	10.0	8.5	16.5	13.5	18.0	14.5	16.5	13.5	17.5	14.5	16.5	14.0
17	11.0	8.5	17.5	14.0	17.0	14.5	17.0	13.5	16.5	15.0	16.0	13.5
18	11.5	9.0	17.5	14.5	17.0	13.5	17.0	13.5	16.0	14.5	16.0	14.5
19	11.5	10.0	16.5	14.5	16.5	14.0	17.0	13.5	15.5	14.0	16.5	14.0
20	12.5	9.5	15.5	13.0	16.5	13.5	17.0	13.5	16.5	13.5	16.0	14.0
21	12.5	10.5	15.5	13.0	16.5	13.5	17.0	13.5	16.0	14.5	15.5	14.0
22	12.0	10.0	16.0	13.5	16.5	13.0	17.5	13.5	16.5	14.0	15.5	13.5
23	11.5	10.5	16.5	13.5	16.0	13.5	17.5	14.0	16.5	14.0	15.5	13.5
24	11.0	10.0	17.0	14.0	14.5	13.0	19.5	14.5	17.0	14.0	16.0	13.5
25	10.0	9.5	17.0	14.0	15.0	12.0	20.0	15.0	17.0	14.5	15.5	13.5
26	10.5	8.5	16.5	14.0	15.0	12.0	19.5	15.0	17.0	15.0	15.0	13.0
27	12.0	9.0	17.0	14.0	15.0	12.0	19.5	15.5	16.5	14.0	15.0	13.0
28	12.5	10.0	17.0	14.0	15.5	12.0	19.0	15.0	16.0	14.0	14.5	12.5
29	13.0	10.0	17.0	14.0	15.5	12.0	18.5	15.0	16.5	13.5	14.5	12.5
30	13.5	10.5	17.5	14.0	15.0	12.5	17.5	14.5	16.0	13.5	14.5	12.5
31	---	---	19.0	15.0	---	---	17.5	14.0	16.0	13.5	---	---
MONTH	13.5	7.5	19.0	10.0	18.0	12.0	20.0	12.0	18.0	13.5	17.0	12.5

11413700 YUBA RIVER BELOW COLGATE POWERHOUSE, NEAR FRENCH CORRAL, CALIF.

LOCATION.--Lat 39°19'48", long 121°11'40", in NW¼SE¼ sec.16, T.17 N., R.7 E., Yuba County, temperature recorder on right bank 300 ft (90 m) upstream from Dobbins Creek, 0.3 mi (0.5 km) downstream from Colgate powerhouse, and 2.4 mi (3.9 km) northwest of French Corral.
DRAINAGE AREA.--717 mi² (1,857 km²).
PERIOD OF RECORD.--Water temperatures: October 1974 to September 1975.
EXTREMES.--Current year:
Water temperatures: Maximum, 26.0°C July 27; minimum, 4.5°C Feb. 1.
REMARKS.--Stream temperatures are affected by operation of Colgate powerplant.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	8.5	7.5	6.5	6.5	7.5	7.0	6.5	4.5	10.0	6.5
2	---	---	7.5	6.5	6.5	6.5	7.5	7.5	5.5	5.0	9.5	6.0
3	---	---	7.5	6.5	6.5	6.5	7.5	7.5	6.5	5.0	9.0	6.0
4	---	---	7.5	6.0	7.0	6.5	7.5	7.5	6.5	6.0	6.5	6.5
5	---	---	7.5	6.5	6.5	6.5	7.5	7.5	6.0	5.5	6.5	6.5
6	---	---	7.5	6.5	6.5	6.5	7.5	7.5	6.5	5.5	7.0	6.5
7	---	---	7.0	7.0	6.5	6.5	7.5	7.5	7.5	6.5	8.5	6.5
8	---	---	7.5	6.5	6.5	6.5	7.5	7.5	8.5	7.5	9.0	7.0
9	---	---	7.0	6.0	7.0	6.5	8.0	7.5	9.0	7.0	9.0	8.5
10	18.0	15.5	7.5	6.5	6.5	6.5	7.5	7.5	8.0	7.5	10.0	6.5
11	17.5	15.0	7.5	6.5	6.5	6.5	7.5	7.5	9.5	8.0	11.0	7.5
12	15.0	9.0	7.5	6.5	6.5	6.5	7.5	7.5	8.5	7.0	9.0	6.0
13	9.0	7.5	7.5	7.0	7.0	6.5	7.5	7.5	8.0	7.5	8.5	6.0
14	8.5	7.0	8.0	7.0	7.0	6.5	7.5	7.0	8.5	7.5	7.0	6.5
15	8.5	7.0	8.5	7.0	7.0	7.0	7.5	7.0	8.0	6.5	7.5	6.0
16	8.5	7.0	8.0	6.0	7.0	7.0	7.5	7.0	7.5	6.0	7.5	6.5
17	8.5	7.0	6.0	6.0	7.0	7.0	7.5	7.0	7.0	5.0	7.5	6.5
18	9.0	7.5	6.0	6.0	7.0	7.0	8.0	7.0	6.5	4.5	7.5	6.5
19	8.5	7.5	6.0	6.0	7.0	7.0	7.5	7.0	7.0	6.0	8.5	6.5
20	8.5	7.5	6.0	6.0	7.0	7.0	7.5	6.5	7.5	6.5	9.0	6.5
21	8.5	7.0	6.0	6.0	7.0	7.0	8.0	6.5	6.5	6.0	8.0	6.5
22	8.0	6.5	6.0	6.0	7.0	7.0	7.5	6.5	7.0	5.5	7.0	6.0
23	8.0	6.5	6.0	6.0	7.0	7.0	7.5	6.5	6.5	5.5	7.5	6.0
24	8.0	6.5	6.0	6.0	7.0	7.0	7.5	6.5	6.5	6.0	8.0	6.5
25	8.5	7.0	6.5	6.0	7.5	7.0	7.5	7.0	6.5	6.0	9.5	7.0
26	8.5	7.0	6.5	6.0	7.5	7.0	8.0	7.0	7.0	6.5	7.5	6.0
27	8.0	7.0	6.5	6.0	7.0	7.0	7.5	6.5	6.5	6.5	8.0	6.0
28	8.5	7.5	6.5	6.5	7.5	7.0	7.5	6.5	9.0	6.5	7.0	6.5
29	8.0	7.0	6.5	6.5	7.5	7.0	7.5	6.0	---	---	6.5	6.0
30	7.5	6.5	6.5	6.5	7.5	7.0	7.5	6.0	---	---	7.5	6.0
31	7.5	7.0	---	---	8.0	7.5	7.0	6.0	---	---	7.0	6.0
MONTH	---	---	8.5	6.0	8.0	6.5	8.0	6.0	9.5	4.5	11.0	6.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.5	6.0	8.5	6.0	18.0	11.0	12.5	11.0	16.0	15.0	13.5	13.0
2	6.5	6.0	8.5	6.0	16.0	11.0	12.5	11.0	16.0	15.0	13.5	13.0
3	6.5	6.0	13.0	6.5	11.5	11.0	12.5	11.0	25.5	15.5	14.0	12.5
4	6.5	6.0	13.5	6.5	11.5	10.5	13.5	11.5	16.5	15.0	14.0	13.0
5	6.5	6.0	10.5	6.5	11.0	10.5	20.0	11.0	16.5	16.0	14.0	13.5
6	6.5	6.0	14.0	7.0	11.0	10.5	12.0	11.5	16.5	15.0	14.5	14.0
7	6.5	6.0	13.5	8.0	11.0	10.5	12.5	11.5	17.0	16.0	14.5	13.5
8	6.0	6.0	13.5	6.5	12.0	10.5	19.0	12.0	17.0	16.5	14.5	13.5
9	6.5	6.0	14.0	6.5	11.5	10.0	20.5	11.5	17.5	14.0	15.0	13.5
10	6.5	6.5	17.5	8.0	11.0	10.0	12.5	12.0	17.5	17.0	14.5	14.5
11	6.5	6.0	19.0	14.5	11.0	10.5	13.0	12.0	17.5	17.0	15.0	14.0
12	6.5	6.5	16.0	7.0	13.0	10.5	22.0	12.0	17.5	17.0	15.0	13.5
13	6.5	6.0	14.5	11.5	11.5	11.0	23.0	12.0	18.0	17.0	15.0	14.0
14	6.5	6.0	14.5	10.5	13.5	11.0	15.0	12.0	18.0	17.0	23.0	14.5
15	6.5	6.0	13.5	10.5	12.5	11.0	13.0	12.5	18.0	17.5	15.0	14.0
16	6.5	6.5	13.0	10.0	12.5	11.0	14.0	11.5	18.5	17.0	15.0	14.0
17	6.5	6.0	16.5	10.0	13.0	11.0	14.5	11.5	18.0	17.0	15.0	14.5
18	6.5	6.0	16.0	10.0	11.5	10.5	13.5	12.0	18.0	17.0	15.0	14.5
19	7.0	6.0	14.5	9.5	11.5	11.0	13.5	12.5	17.5	17.0	15.5	14.0
20	6.5	6.0	13.5	9.5	11.5	11.0	13.5	12.0	18.0	17.0	16.0	14.5
21	6.5	6.0	11.0	8.5	11.5	11.0	13.5	12.0	17.5	17.0	23.0	7.0
22	6.5	6.0	11.0	10.0	12.0	11.0	14.0	13.5	17.5	16.5	7.0	6.5
23	6.5	6.0	12.0	10.0	12.0	10.5	14.0	13.5	19.5	12.0	7.0	6.5
24	7.0	6.0	20.5	10.0	12.5	11.0	14.0	13.5	13.0	12.0	7.0	6.5
25	8.0	6.0	20.0	16.0	12.0	11.0	14.5	13.5	13.0	11.0	7.0	6.5
26	10.0	6.0	19.0	16.5	11.5	11.0	14.5	14.0	13.0	12.5	7.0	6.5
27	9.0	6.0	17.0	12.5	11.5	11.0	26.0	14.0	13.0	12.5	7.0	6.5
28	8.0	6.0	13.5	12.5	12.0	11.5	15.0	14.5	13.5	12.0	7.0	6.5
29	7.0	6.0	13.5	12.0	20.0	11.0	15.0	14.0	13.5	13.0	7.0	6.5
30	7.5	6.5	18.5	11.5	12.5	10.5	15.5	14.5	13.5	13.0	7.0	6.5
31	---	---	12.5	11.0	---	---	15.5	15.0	14.0	11.5	---	---
MONTH	10.0	6.0	20.5	6.0	20.0	10.0	26.0	11.0	25.5	11.0	23.0	6.5

11414000 SOUTH YUBA RIVER NEAR CISCO, CALIF.

LOCATION.--Lat 39°19'12", long 120°33'38", in SE¼SW¼ sec.19, T.17 N., R.13 E., Nevada County, Tahoe National Forest, on right bank 0.7 mi (1.1 km) downstream from Rattlesnake Creek, 1.3 mi (2.1 km) west of Cisco Grove, and 1.5 mi (2.4 km) northwest of Cisco.

DRAINAGE AREA.--51.8 mi^2 (134.2 km^2).

PERIOD OF RECORD.--April 1942 to current year. Prior to October 1949, published as South Fork Yuba River near Cisco.

GAGE.--Water-stage recorder. Altitude of gage is 5,520 ft (1,682 m), from river-profile map. Prior to October 1945, water-stage recorder at site 200 ft (61 m) upstream at same datum.

AVERAGE DISCHARGE.--33 years, 203 ft^3/s (5.749 m^3/s), 147,100 acre-ft/yr (181 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,480 ft^3/s (70.2 m^3/s) May 31 (gage height, 7.89 ft or 2.405 m); minimum daily, 9.7 ft^3/s (0.27 m^3/s) Aug. 28, 29.

Period of record: Maximum discharge, 18,400 ft^3/s (521 m^3/s) Jan. 31, 1963 (gage height, 19.6 ft or 5.97 m, from floodmarks in gage house, 20.6 ft or 6.28 m, from outside floodmarks), from rating curve extended above 4,600 ft^3/s (130 m^3/s) on basis of slope-area measurement at gage height 15.8 ft (4.81 m); minimum daily, 0.1 ft^3/s (0.003 m^3/s) Nov. 5-7, 1954.

REMARKS.--Records excellent. Low flow regulated by Lake Van Norden, capacity, 4,320 acre-ft (5.33 hm^3), 5,260 acre-ft (6.49 hm^3) with flashboards. See schematic diagram of Yuba River basin.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	28	14	17	24	102	118	204	1640	382	13	11
2	32	26	15	16	24	106	103	322	1420	343	11	10
3	29	26	40	16	23	99	97	370	1450	317	14	10
4	27	25	59	17	23	98	85	230	1520	301	17	9.9
5	26	25	28	16	24	102	78	160	1610	297	16	12
6	24	24	24	23	24	95	71	148	1670	287	16	15
7	24	24	22	38	25	88	66	212	1430	261	16	15
8	23	18	20	40	44	81	63	383	1280	225	15	15
9	23	16	19	30	89	72	60	560	1230	205	15	15
10	21	15	19	26	76	65	63	711	1200	178	15	15
11	20	15	19	24	59	61	64	806	1210	161	15	48
12	19	15	27	23	50	58	72	892	1210	150	14	51
13	17	15	33	23	51	58	93	1020	1330	128	14	52
14	16	17	26	24	53	55	117	1150	1290	108	15	51
15	16	18	24	25	48	54	98	1000	1230	104	15	50
16	15	16	26	25	41	56	83	926	1110	115	14	50
17	14	16	25	25	39	52	75	1150	895	93	14	50
18	13	19	22	28	37	50	72	1560	638	84	18	50
19	13	17	20	31	37	58	74	1570	505	74	25	49
20	12	16	20	33	39	58	83	1050	574	64	20	49
21	12	32	20	35	39	54	132	574	630	56	19	48
22	20	25	19	36	34	51	186	675	632	47	19	54
23	21	21	18	36	34	54	178	1050	620	40	16	90
24	21	20	16	39	40	65	212	1350	559	34	14	91
25	20	19	18	44	46	272	188	1360	428	28	14	90
26	20	17	17	47	54	178	127	1360	447	26	13	64
27	21	16	21	39	62	125	112	1380	450	22	12	61
28	40	15	20	33	80	115	136	1390	461	19	9.7	61
29	24	15	17	29	---	81	172	1470	465	17	9.7	59
30	22	14	17	25	---	93	194	1500	436	16	11	58
31	27	---	16	24	---	127	---	1690	---	14	10	---
TOTAL	671	585	701	887	1219	2683	3272	28223	29570	4196	459.4	1303.9
MEAN	21.6	19.5	22.6	28.6	43.5	86.5	109	910	986	135	14.8	43.5
MAX	40	32	59	47	89	272	212	1690	1670	382	25	91
MIN	12	14	14	16	23	50	60	148	428	14	9.7	9.9
AC-FT	1330	1160	1390	1760	2420	5320	6490	55980	58650	8320	911	2590

CAL YR 1974 TOTAL 92068.0 MEAN 252 MAX 1840 MIN 12 AC-FT 182600
WTR YR 1975 TOTAL 73770.3 MEAN 202 MAX 1690 MIN 9.7 AC-FT 146300

Peak discharge (base, 1,500 ft^3/s).--May 18 (2100) 2,230 ft^3/s (7.55 ft); May 31 (2030) 2,480 ft^3/s (7.89 ft).

11414100 FORDYCE CREEK BELOW FORDYCE DAM, NEAR CISCO, CALIF.

LOCATION.--Lat 39°22'45", long 120°29'52", in NW¼SE¼ sec.34, T.18 N., R.13 E., Nevada County, Tahoe National Forest, on right bank 850 ft (259 m) downstream from Fordyce Dam, and 5.3 mi (8.5 km) northeast of Cisco.

DRAINAGE AREA.--31.7 mi² (82.1 km²).

PERIOD OF RECORD.--June 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,250 ft (1,905 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 138 ft³/s (3.908 m³/s), 99,980 acre-ft/yr (123 hm³/yr). 8 years, 140 ft³/s (3.965 m³/s), 101,400 acre-ft/yr (125 hm³/yr); figure published in Water Resources Data for Calif., 1974, in error.

EXTREMES.--Current year: Maximum discharge, 1,160 ft³/s (32.9 m³/s) June 14, 15 (gage height, 4.90 ft or 1.494 m); minimum daily, 5.4 ft³/s (0.15 m³/s) Oct. 11.

Period of record: Maximum discharge, 4,660 ft³/s (132 m³/s) July 9, 1974 (gage height, 7.90 ft or 2.408 m in gage well, 6.82 ft or 2.079 m, from high-water marks), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 5.3 ft³/s (0.15 m³/s) Jan. 8, 9, 1968.

REMARKS.--Flow regulated by Fordyce Lake, usable capacity, 46,662 acre-ft (57.5 hm³). See schematic diagram of Yuba River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	371	8.0	7.9	9.5	7.7	11	13	117	52	423	69	40
2	366	8.0	8.0	9.5	7.7	11	13	118	54	388	68	118
3	360	8.0	8.0	9.6	7.8	11	13	117	57	385	68	187
4	348	7.9	8.1	9.6	8.0	11	13	117	58	385	68	187
5	346	7.7	8.1	9.7	8.0	11	13	116	62	391	68	122
6	341	7.7	8.2	9.7	8.0	11	13	115	335	405	68	40
7	336	7.7	8.2	9.8	8.1	11	13	117	607	401	68	40
8	331	7.7	8.3	9.8	8.7	11	12	120	605	373	67	40
9	326	7.7	8.3	9.9	9.4	11	12	121	611	310	67	40
10	214	7.6	8.4	9.9	8.8	11	12	123	619	186	67	40
11	5.4	7.4	8.4	10	41	11	12	126	668	95	151	40
12	5.6	7.4	8.5	10	76	11	12	130	911	178	276	40
13	5.6	7.4	8.5	10	76	11	12	133	991	199	274	40
14	5.8	7.4	8.6	10	76	11	13	71	1060	149	272	40
15	9.3	7.4	8.6	10	75	12	48	17	1060	144	164	40
16	9.3	7.2	8.7	9.3	74	12	81	19	1010	146	57	40
17	9.0	7.2	8.7	9.4	74	12	81	22	693	137	57	40
18	9.0	7.2	8.8	9.6	73	12	81	25	608	109	295	40
19	7.5	7.1	8.8	9.6	73	12	80	27	336	95	551	40
20	7.4	7.1	8.9	9.6	44	12	80	28	267	96	548	40
21	7.4	6.9	8.9	9.6	11	12	80	29	317	97	543	40
22	7.7	7.0	9.0	8.7	11	12	80	31	390	79	537	188
23	7.7	7.3	9.0	8.0	11	12	84	34	598	73	532	228
24	7.7	7.2	9.1	8.1	11	13	84	36	681	72	529	289
25	7.7	7.1	9.1	8.2	11	15	84	38	397	71	526	343
26	7.7	7.1	9.2	8.0	11	13	84	40	303	70	523	437
27	7.7	7.7	9.2	7.8	11	13	83	42	285	70	521	509
28	7.9	7.8	9.3	7.7	11	13	82	45	396	69	516	503
29	8.2	7.8	9.3	7.8	---	13	82	47	487	69	267	502
30	8.0	7.9	9.4	7.8	---	13	100	47	478	69	40	496
31	8.0	---	9.4	7.7	---	13	---	50	---	69	40	---
TOTAL	3498.6	224.6	268.9	283.9	852.2	368	1470	2218	14996	5803	7897	4709
MEAN	113	7.49	8.67	9.16	30.4	11.9	49.0	71.5	500	187	255	157
MAX	371	8.0	9.4	10	76	15	100	133	1060	423	551	509
MIN	5.4	6.9	7.9	7.7	7.7	11	12	17	52	69	40	40
AC-FT	6940	445	533	563	1690	730	2920	4400	29740	11510	15660	9340

CAL YR 1974 TOTAL 74661.1 MEAN 205 MAX 1790 MIN 5.4 AC-FT 148100
WTR YR 1975 TOTAL 42589.2 MEAN 117 MAX 1060 MIN 5.4 AC-FT 84485

NOTE.--No gage-height record Nov. 27 to Jan. 16.

11414140 LAKE SPAULDING NEAR EMIGRANT GAP, CALIF.

LOCATION.--Lat 39°19'35", long 120°38'32", in SE¼NE¼ sec.20, T.17 N., R.12 E., Nevada County, on left abutment of Spaulding Dam on South Yuba River, 2.5 mi (4.0 km) northeast of Emigrant Gap.

DRAINAGE AREA.--118 mi^2 (306 km^2).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,809.6 ft (1,465.97 m) above mean sea level (levels by Pacific Gas and Electric Co.). Prior to July 1968, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 74,773 acre-ft (94.2 hm^3) June 23 to July 6 (gage height, 205.0 ft or 62.48 m); minimum, 2,942 acre-ft (3.63 hm^3) Feb. 6 (gage height, 41.2 ft or 12.56 m).
Period of record: Maximum contents, 75,100 acre-ft (92.6 hm^3) July 13, 1967 (gage height, 205.5 ft or 62.64 m); minimum, 2,942 acre-ft (3.63 hm^3) Feb. 6, 1975 (gage height, 41.2 ft or 12.56 ft).

REMARKS.--Lake is formed by three concrete-arch dams with spillway on the middle arch. Storage began in 1913. Capacity, 74,773 acre-ft (92.20 hm^3) between gage heights 0.6 ft (0.18 m), bottom of outlet and 205.0 ft (62.48 m), top of radial gates. Released water flows through Spaulding powerhouses Nos. 1 and 2. Flow through powerhouse No. 1 is transported out of Yuba River basin by Drum Canal to Bear River basin. See schematic diagrams of Yuba River and Bear River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project. Contents not rounded to Geological Survey standards.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

11	329	50	4,578
15	427	70	9,632
20	566	100	19,541
25	874	150	41,545
30	1,352	200	71,329
40	2,742	206	75,473

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47809	19176	12351	9809	4537	5547	5125	6571	67454	74773	47864	25952
2	47257	17739	12288	9691	4337	5651	4996	7339	69243	74773	46873	24768
3	46709	17140	12320	9573	4259	5434	4910	8311	71125	74773	45783	24086
4	46163	15931	12637	9485	3166	4953	4784	8591	71804	74773	45297	23571
5	45837	14952	12605	9367	2959	4953	4784	8284	71872	74773	44118	23100
6	45135	13829	12446	9367	2942	5125	3930	8009	71736	74773	43111	23611
7	44598	12796	12796	9367	2976	5412	3930	7981	71532	74425	41493	24206
8	44118	12131	13084	9367	3079	5847	3930	8619	71532	73868	40413	24768
9	43534	12383	13116	9367	3201	5701	3930	10107	71329	73245	39045	24890
10	42848	12764	12892	8284	3306	5593	3930	12162	71532	72215	38096	25418
11	41752	12478	12782	7657	5636	5256	3836	13992	71600	71057	36912	26076
12	40823	11991	12510	6798	5661	4974	3836	16825	71396	69778	37108	26575
13	40107	11538	12510	6276	6621	5190	3836	18748	71600	68910	36279	27163
14	38995	11014	12478	5917	6823	5434	3988	22094	71396	68180	35554	27842
15	37897	10740	12288	5730	6472	5479	3988	24007	71329	66478	34742	28400
16	36864	10984	12162	5638	5434	5502	3988	26284	71329	65171	33657	28484
17	35699	11229	12005	5593	5479	5988	3988	28270	71125	64462	32728	29006
18	34790	11229	11888	5570	6325	6497	3988	31675	71057	64077	31811	29619
19	33284	11145	11755	5570	6035	6621	3930	36182	71396	62360	31493	30149
20	31857	10892	11538	5570	5777	6747	3912	38494	71872	60917	31358	30728
21	30773	10770	11352	5570	5434	6227	3912	38594	72694	59575	31629	31177
22	29619	10831	11260	5570	5434	5547	4142	39146	73664	58326	31629	31766
23	28572	11076	11076	5570	5434	5323	4996	40618	74773	56871	31177	32590
24	27417	11291	10862	5570	5823	5039	6349	43746	74773	55435	30952	33424
25	26367	11445	10679	5638	5730	7577	6900	45243	74773	54783	30728	34457
26	25296	11260	10498	5638	5479	7657	6722	47975	74773	54135	30505	34457
27	24726	11137	10377	5661	5367	7079	6374	51754	74773	53258	30193	34221
28	23335	11476	10227	5345	5389	6951	6203	54842	74773	52503	29883	33986
29	22286	11755	10018	5213	---	6747	6203	57596	74773	51067	29224	33751
30	21407	12068	9573	5103	---	6423	6374	60357	74773	50102	28184	33704
31	20280	---	9958	5017	---	6203	---	64591	---	49145	27078	---
MAX	47809	19176	13116	9809	6823	7657	6900	64591	74773	74773	47864	34457
MIN	20280	10740	9573	5017	2942	4953	3836	6571	67454	49145	27078	23100
(a)	102.0	78.0	71.1	52.1	53.8	57.3	58.0	189.8	205.0	164.1	119.2	134.1
(b)	-27,861	-8,212	-2,110	-4,941	+372	+814	+171	+58,217	+10,182	-25,628	-22,067	+6,626

CAL YR 1974	b -14,437
WTR YR 1975	b -47,066

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.

11414170 DRUM CANAL AT TUNNEL OUTLET, NEAR EMIGRANT GAP, CALIF.

LOCATION.--Lat 39°19'03", long 120°39'08", in SE¼SW¼ sec.20, T.17 N., R.12 E., Nevada County, in Tahoe National Forest, 100 ft (30 m) downstream from tunnel outlet, 1.0 mi (1.6 km) downstream from Spaulding No. 1 powerhouse, and 1.7 mi (2.7 km) northeast of Emigrant Gap.

PERIOD OF RECORD.--October 1964 to current year. Prior to October 1972, published as "Drum Canal at intake."

GAGE.--Water-stage recorder. Altitude of gage is 4,880 ft (1,487 m), from topographic map. Prior to Oct. 1, 1968, in powerhouse 0.7 mi (1.1 km) upstream at different datum.

AVERAGE DISCHARGE.--11 years, 553 ft³/s (15.66 m³/s), 400,600 acre-ft/yr (494 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 848 ft³/s (24.0 m³/s) May 12, 1975; no flow for several days in most years.

REMARKS.--Canal diverts from Spaulding No. 1 powerhouse at Lake Spaulding Dam. Water is used for irrigation and power in the Bear River basin. See schematic diagrams of Yuba River and Bear River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	774	763	102	305	275	302	671	683	826	837	767	756
2	776	763	278	302	251	306	559	713	833	837	755	758
3	776	763	354	300	311	433	485	744	832	837	767	764
4	771	763	359	298	296	492	545	758	829	837	766	763
5	776	763	359	296	201	365	463	754	819	837	768	438
6	776	763	330	347	123	295	362	743	825	809	769	1.0
7	775	763	103	451	109	344	392	735	830	735	771	.30
8	775	769	103	454	102	238	401	743	831	742	771	11
9	776	792	299	436	136	433	412	771	833	739	767	8.2
10	776	793	360	532	185	338	413	806	834	731	766	0
11	773	652	361	600	120	427	437	832	835	727	762	0
12	775	484	357	524	153	401	459	848	835	725	759	0
13	770	437	354	405	285	302	484	839	839	722	760	0
14	772	456	353	288	475	212	515	826	841	717	763	0
15	774	368	353	163	518	326	518	809	835	712	761	0
16	774	96	350	122	290	309	513	819	835	709	765	0
17	767	97	350	125	104	50	522	824	835	704	767	0
18	761	252	347	126	258	58	519	830	831	701	760	0
19	762	314	343	126	400	324	516	833	833	697	764	0
20	781	329	341	126	397	551	513	824	833	691	764	0
21	773	326	337	126	222	576	518	827	836	704	756	0
22	776	292	334	126	89	562	544	827	837	727	770	0
23	767	138	330	127	95	393	568	831	836	728	770	7.1
24	757	104	327	126	98	397	640	830	835	723	768	27
25	757	265	325	126	246	259	691	833	837	735	767	64
26	763	339	322	127	317	455	707	834	840	753	765	495
27	763	294	319	160	289	653	690	831	842	766	765	737
28	763	98	315	195	286	735	678	831	840	762	765	764
29	763	101	311	192	---	721	675	833	835	758	764	773
30	763	102	309	173	---	704	678	832	836	761	761	783
31	763	---	306	147	---	689	---	829	---	765	763	---
TOTAL	23866	13239	9691	7951	6631	12650	16088	24872	25018	23228	23706	7149.60
MEAN	770	441	313	256	237	408	536	802	834	749	765	238
MAX	781	793	361	600	518	735	707	848	842	837	771	783
MIN	757	96	102	122	89	50	362	683	819	691	755	0
AC-FT	47340	26260	19220	15770	13150	25090	31910	49330	49620	46070	47020	14180

CAL YR 1974 TOTAL 235548.25 MEAN 645 MAX 806 MIN 0 AC-FT 467200
WTR YR 1975 TOTAL 194089.60 MEAN 532 MAX 848 MIN 0 AC-FT 385000

11414190 DRUM CANAL ABOVE DRUM FOREBAY, NEAR BLUE CANYON, CALIF.

LOCATION.--Lat 39°15'50", long 120°43'47", in NE¼SW¼ sec.10, T.16 N., R.11 E., Placer County, on right bank 1.2 mi (1.9 km) west of Blue Canyon, and 1.5 mi (2.4 km) upstream from Drum Forebay.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,800 ft (1,463 m), from topographic map.

AVERAGE DISCHARGE.--11 years, 559 ft^3/s (15.83 m^3/s), 405,000 acre-ft/yr (499 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 808 ft^3/s (22.9 m^3/s) June 14, 1975; no flow at times in most years.

REMARKS.--Flow represents water diverted from South Yuba River through Spaulding No. 1 powerplant plus diversion from North Fork American River basin by way of Lake Valley Canal (see sta 11426190). This water enters the Bear River at Drum Forebay. See schematic diagrams of Yuba River and Bear River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	798	793	112	309	279	315	675	716	795	799	802	786
2	801	790	274	307	260	319	578	755	801	798	791	788
3	797	790	358	304	286	437	512	767	803	802	799	794
4	797	792	361	303	271	509	549	771	803	799	802	793
5	803	789	359	301	192	393	478	768	797	797	805	516
6	801	785	348	350	132	311	370	768	794	787	806	28
7	797	795	107	466	118	371	402	767	800	779	806	28
8	800	621	107	475	111	246	408	776	800	791	806	30
9	806	134	283	449	154	467	426	794	800	790	799	33
10	802	139	367	537	208	352	424	790	800	780	797	28
11	799	389	363	618	134	434	447	792	803	775	795	0
12	800	517	360	547	163	424	471	802	801	771	791	0
13	802	470	358	417	302	320	500	802	804	764	792	0
14	803	484	359	304	492	217	537	793	808	763	797	0
15	805	393	357	176	539	334	546	770	803	754	794	0
16	804	125	355	130	325	318	533	787	801	747	796	0
17	796	121	354	132	111	50	539	801	801	745	797	0
18	796	256	351	134	252	58	542	791	798	737	792	0
19	796	316	348	134	420	303	539	793	799	736	799	0
20	796	329	345	134	414	551	537	794	800	730	799	0
21	796	329	344	134	254	586	539	803	803	740	787	0
22	796	294	340	135	97	568	555	800	800	768	801	0
23	795	142	337	135	105	424	577	805	800	768	798	0
24	794	108	333	134	108	389	673	801	802	762	798	0
25	793	266	330	135	242	324	714	799	803	771	796	0
26	792	338	327	136	327	449	718	803	795	788	795	326
27	791	292	325	166	301	646	710	801	793	802	796	744
28	790	102	320	206	297	732	698	802	800	797	798	780
29	790	109	316	203	---	714	695	803	798	795	797	784
30	791	110	313	187	---	708	704	803	798	797	797	784
31	795	---	311	152	---	693	---	800	---	801	794	---
TOTAL	24722	11918	9822	8250	6894	12962	16596	24417	24003	24033	24722	7242
MEAN	797	397	317	266	246	418	553	788	800	775	797	241
MAX	806	795	367	618	539	732	718	805	808	802	806	794
MIN	790	102	107	130	97	50	370	716	793	730	787	0
AC-FT	49040	23640	19480	16360	13670	25710	32920	48430	47610	47670	49040	14360

CAL YR 1974 TOTAL 233055.90 MEAN 639 MAX 806 MIN .05 AC-FT 462300
WTR YR 1975 TOTAL 195581.00 MEAN 536 MAX 808 MIN 0 AC-FT 387900

11414200 SOUTH YUBA CANAL NEAR EMIGRANT GAP, CALIF.

LOCATION.--Lat 39°18'45", long 120°39'45", in SE¼NE¼ sec.30, T.17 N., R.12 E., Nevada County, on left bank of concrete flume 400 ft (122 m) downstream from Bowman Lake Road, and 2.5 mi (4.0 km) northeast of Emigrant Gap.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,640 ft (1,414 m), from topographic map.

AVERAGE DISCHARGE.--11 years, 104 ft^3/s (2.945 m^3/s), 75,350 acre-ft/yr (92.9 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 165 ft^3/s (4.67 m^3/s) Aug. 3, 1965; no flow Apr. 20-22, 1966, Apr. 6-11, 1971.

REMARKS.--Canal diverts from South Yuba River below Lake Spaulding. Water is diverted to Deer Creek powerhouse where it enters Deer Creek and about 30 ft^3/s (0.85 m^3/s) to Boardman Canal (see sta 11421720) via the Bear River. See schematic diagrams of Yuba River and Bear River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	117	59	69	83	42	36	114	139	143	134	125
2	119	122	59	69	83	42	28	114	138	143	133	125
3	120	117	61	69	62	46	41	116	139	143	132	125
4	118	108	61	69	57	40	73	117	140	142	132	125
5	116	103	60	69	58	37	81	116	142	143	129	124
6	97	98	60	62	79	38	76	115	141	139	131	125
7	94	91	61	50	82	38	68	115	141	117	132	126
8	94	93	61	46	69	45	59	115	142	127	132	127
9	93	94	60	48	71	36	7.9	115	143	126	131	127
10	93	94	60	50	74	30	2.2	116	143	128	130	125
11	92	95	60	56	65	25	2.3	118	143	128	130	123
12	94	93	60	55	79	25	2.3	127	142	128	132	125
13	96	94	60	58	71	39	2.3	140	142	128	132	124
14	96	94	59	61	52	45	2.4	137	141	128	131	123
15	95	92	59	60	45	42	2.3	136	140	128	131	125
16	94	92	59	56	45	85	2.3	133	140	127	130	125
17	109	90	52	55	47	87	2.2	133	140	128	130	128
18	125	78	57	55	47	71	2.2	135	140	129	127	127
19	122	70	59	56	47	46	2.3	136	140	128	126	126
20	118	70	59	56	44	22	2.3	136	139	129	123	125
21	118	65	57	59	45	59	2.5	136	144	129	115	125
22	116	62	60	61	47	94	2.6	136	143	119	120	126
23	119	62	60	61	47	93	4.0	138	142	107	125	126
24	122	62	63	61	47	72	7.7	139	141	131	123	126
25	121	61	63	61	48	42	5.0	139	140	130	124	125
26	122	61	63	61	48	33	53	137	141	123	124	122
27	116	59	69	62	46	32	113	139	140	132	124	126
28	115	59	80	66	47	54	112	140	142	132	124	127
29	121	59	79	69	---	49	112	140	142	130	126	110
30	118	59	81	60	---	38	113	138	143	131	126	102
31	114	---	74	70	---	37	---	140	---	132	125	---
TOTAL	3407	2514	1935	1860	1635	1484	1019.8	4008	4233	4028	3972	3720
MEAN	110	83.8	62.4	60.0	58.4	47.9	34.0	129	141	130	128	124
MAX	125	122	81	70	83	94	113	140	144	143	134	128
MIN	92	59	52	46	44	22	2.2	114	138	107	115	102
AC-FT	6760	4990	3840	3690	3240	2940	2020	7950	8400	7990	7880	7380

CAL YR 1974 TOTAL 43179.0 MEAN 118 MAX 149 MIN 1.0 AC-FT 85650
WTR YR 1975 TOTAL 33815.8 MEAN 92.6 MAX 144 MIN 2.2 AC-FT 67070

11414250 SOUTH YUBA RIVER AT LANGS CROSSING, NEAR EMIGRANT GAP, CALIF.

LOCATION.--Lat 39°19'07", long 120°39'27", in SW¼SW¼ sec.20, T.17 N., R.12 E., Nevada County, on right bank 150 ft (46 m) downstream from road bridge, 0.8 mi (1.3 km) downstream from Spaulding Nos. 1 and 2 powerplants, and 1.6 mi (2.6 km) northeast of Emigrant Gap.

DRAINAGE AREA.--120 mi² (311 km²).

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,432.44 ft (1,351.008 m) above mean sea level (levels by Pacific Gas and Electric Co.).

AVERAGE DISCHARGE.--9 years (1966-75), 87.6 ft³/s (2.481 m³/s), 63,470 acre-ft/yr (78.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,530 ft³/s (100 m³/s) June 6 (gage height, 10.01 ft or 3.051 m); minimum daily, 3.8 ft³/s (0.108 m³/s) Aug. 2, 14, Sept. 26.

Period of record: Maximum discharge, 9,700 ft³/s (275 m³/s) Jan. 22, 1970 (gage height, 14.45 ft or 4.404 m); minimum daily, 2.8 ft³/s (0.079 m³/s) Aug. 1, 1974.

REMARKS.--Flow regulated by Lake Spaulding (see sta 11414140). See schematic diagrams of Yuba River and Bear River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	7.0	6.0	5.2	5.7	7.0	7.0	23	23	232	8.2	4.2
2	6.0	6.5	6.0	5.4	6.1	12	6.6	26	194	150	3.8	4.3
3	6.6	6.5	18	5.4	5.4	6.7	6.3	39	516	123	4.2	4.1
4	6.4	6.6	23	6.0	4.4	6.4	11	31	1210	96	4.1	4.8
5	6.0	6.8	9.5	5.8	4.2	11	9.5	24	1690	88	4.1	4.3
6	6.0	6.5	7.1	21	5.7	18	6.8	21	2070	87	4.2	4.4
7	5.6	6.9	5.8	28	8.0	26	7.4	21	1840	29	4.1	4.3
8	6.0	6.7	5.2	42	18	41	11	24	1520	27	4.1	4.1
9	6.3	6.3	4.9	16	48	13	12	26	1430	26	4.1	4.3
10	6.9	6.0	4.6	11	23	7.3	14	26	1250	23	4.2	4.4
11	6.8	6.2	4.5	9.3	16	6.0	16	26	1340	23	4.2	4.5
12	7.1	6.7	5.0	8.3	18	6.0	19	26	1700	20	4.2	4.5
13	7.1	6.7	5.1	7.7	67	17	21	26	1890	18	4.0	4.4
14	7.0	6.3	4.7	7.5	34	14	25	25	2120	15	3.8	4.4
15	6.9	6.3	4.8	7.2	6.4	6.4	21	22	1620	12	4.2	4.3
16	6.8	6.0	4.9	7.0	6.4	7.4	18	18	1190	11	4.1	4.3
17	6.3	6.0	4.6	6.7	6.4	11	16	17	1040	9.9	4.1	4.0
18	6.0	6.4	4.6	6.6	6.4	18	15	17	570	8.8	5.1	4.0
19	6.0	6.2	4.6	6.6	34	27	15	18	190	8.2	5.8	4.0
20	6.1	6.2	4.7	6.6	8.4	6.1	18	16	28	6.9	5.9	3.9
21	6.3	13	5.6	6.4	6.4	7.5	23	14	16	6.3	5.0	3.9
22	6.3	11	6.1	6.3	6.4	8.0	24	12	20	6.3	5.1	3.9
23	6.3	8.0	5.6	6.0	6.4	14	22	11	47	6.6	5.1	4.2
24	6.3	7.2	5.5	5.8	6.4	28	63	9.8	493	10	5.1	4.6
25	6.3	8.0	5.6	5.6	6.4	52	46	13	215	9.6	5.0	3.9
26	6.3	7.1	5.7	5.6	6.4	6.5	26	18	157	9.4	4.9	3.8
27	6.6	6.7	6.4	5.1	6.4	6.4	23	18	116	8.1	4.8	4.1
28	12	6.2	6.6	5.0	6.4	6.3	22	18	221	7.5	5.0	4.3
29	7.7	6.0	6.3	5.1	---	6.4	22	18	309	7.8	4.8	4.4
30	7.2	6.0	5.3	4.6	---	6.8	23	18	305	8.1	4.9	5.7
31	7.9	---	4.4	5.0	---	7.1	---	20	---	8.2	4.9	---
TOTAL	205.7	208.0	200.7	279.8	382.7	416.3	569.6	641.8	25330	1101.7	145.1	128.3
MEAN	6.64	6.93	6.47	9.03	13.7	13.4	19.0	20.7	844	35.5	4.68	4.28
MAX	12	13	23	42	67	52	63	39	2120	232	8.2	5.7
MIN	4.6	6.0	4.4	4.6	4.2	6.0	6.3	9.8	16	6.3	3.8	3.8
AC-FT	408	413	398	555	759	826	1130	1270	50240	2190	288	254

CAL YR 1974 TOTAL 36891.6 MEAN 101 MAX 2000 MIN 2.8 AC-FT 73170
WTR YR 1975 TOTAL 29609.7 MEAN 81.1 MAX 2120 MIN 3.8 AC-FT 58730

NOTE.--No gage-height record Feb. 20 to Apr. 7.

11415500 BOWMAN LAKE NEAR GRANITEVILLE, CALIF.

LOCATION.--Lat 39°27'01", long 120°39'10", in SE¼SW¼ sec.5, T.18 N., R.12 E., Nevada County, on right bank near rockfill portion of Bowman Dam on Canyon Creek, 4.5 mi (7.2 km) east of Graniteville, and 8 mi (13 km) south of Sierra City.

DRAINAGE AREA.--27.1 mi² (70.2 km²).

PERIOD OF RECORD.--December 1926 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Nevada Irrigation District). Prior to Oct. 8, 1964, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 68,900 acre-ft (85.0 hm³) July 12-14 (elevation, 5,563.9 ft or 1,695.88 m); minimum, 17,600 acre-ft (21.7 hm³) Apr. 12, 13, 18-21 (elevation, 5,487.4 ft or 1,672.56 m).

Period of record: Maximum contents, 71,000 acre-ft (87.5 hm³) May 30, 1965 (elevation, 5,566.5 ft or 1,696.67 m); minimum observed under normal operating conditions since reservoir first filled, 1,000 acre-ft (1.23 hm³) Mar. 4, 1931 (elevation 5,430.1 ft or 1,655.09 m).

REMARKS.--Lake is formed by one rockfill and one concrete-arch dam; storage began in November 1926. Total capacity, 68,200 acre-ft (84.1 hm³) between elevations, 5,400 ft (1,645.9 m), bottom of outlet tunnel and 5,563 ft (1,695.6 m), crest of concrete-arch dam. Flashboards are occasionally added, increasing elevation to 5,565.8 ft (1,696.46 m) and capacity to 70,400 acre-ft (86.8 hm³), all of which is available for release. Lake receives water from Middle Yuba River through Milton-Bowman tunnel (see sta 11408000), and releases it through Bowman-Spaulding Canal (see sta 11416000) which conveys it to reservoirs of Pacific Gas and Electric Co. Water is eventually used for irrigation by Nevada Irrigation District. See schematic diagram of Yuba River basin. Lake completely drained for inspection and repair Nov. 25 to Dec. 9, 1949, Oct. 1-20, 1966, Oct. 4-29, 1972.

COOPERATION.--Forty nonrecording gage readings furnished by Nevada Irrigation District.

REVISIONS.--WSP 1931: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,419.6	0	5,460	6,900
5,425	500	5,470	10,200
5,430	900	5,480	14,200
5,435	1,400	5,510	30,000
5,440	2,100	5,540	49,800
5,450	4,100	5,570	73,800

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60000	58800	44300	30300	27100	25300	20800	19200	49800	67900	64500	54800
2	60000	58700	43700	29800	27100	25400	20400	19100	51600	67800	64000	54800
3	60000	58600	43400	29300	27100	25400	20100	19300	53400	67600	63500	54900
4	60000	58500	42900	29000	27000	25500	19800	19400	55200	67500	62900	55000
5	59900	58500	42400	28800	26800	25600	19600	19300	57000	67300	62400	55100
6	59900	58200	41800	28700	26500	25600	19200	19200	58800	67500	61800	55200
7	59900	57600	41300	28600	26300	25700	18800	19200	60400	67800	61300	55200
8	59800	57100	40800	28600	26000	25800	18400	19600	61800	68100	60700	55400
9	59800	56500	40400	28500	26100	25800	18000	20200	63000	68400	60100	55500
10	59700	56000	39900	28400	26000	25700	17800	21000	64100	68700	59600	55600
11	59700	55300	39400	28400	25900	25500	17700	21900	65200	68800	58900	55700
12	59600	54800	39000	28100	25900	25300	17600	23000	66000	68900	58400	55900
13	59600	54200	38500	27900	25900	25000	17600	24400	67100	68900	57700	56000
14	59600	53600	38000	27800	25800	24600	17700	26000	68000	68900	57200	56100
15	59600	53000	37600	27700	25700	24300	17700	27300	68200	68800	56500	56200
16	59500	52400	37100	27700	25600	24000	17700	28500	68000	68800	56000	56400
17	59500	51800	36700	27600	25400	23600	17700	29900	67900	68800	55300	56400
18	59400	51200	36200	27500	25400	23400	17600	31300	67900	68800	54800	56500
19	59300	50600	35800	27500	25400	23100	17600	32600	67900	68800	54500	56700
20	59200	50000	35400	27400	25400	22800	17600	33600	68000	68800	54400	56800
21	59200	49600	34900	27400	25400	22700	17600	34300	68200	68800	54400	56900
22	59100	49100	34400	27400	25300	22500	17700	35000	68400	68800	54500	57000
23	59100	48500	34100	27300	25300	22200	17800	35900	68200	68700	54500	57100
24	59000	48000	33600	27200	25300	22100	18200	37100	68400	68400	54600	57200
25	58900	47600	33200	27200	25200	22400	18500	38300	68400	68000	54700	57300
26	58900	47000	32800	27200	25200	22200	18600	39700	68400	67600	54800	57400
27	58800	46400	32400	27100	25200	22100	18700	41100	68200	67100	54800	57500
28	58900	45500	32000	27100	25300	21800	18800	42700	68200	66500	54800	57600
29	58900	45400	31700	27100	---	21600	18800	44400	68100	66000	54800	57700
30	58800	44800	31200	27000	---	21300	19000	46200	68000	65500	54800	57800
31	58800	---	30800	27000	---	21000	---	48000	---	65000	54800	---
MAX	60000	58800	44300	30300	27100	25800	20800	48000	68400	68900	64500	57800
MIN	58800	44800	30800	27000	25200	21000	17600	19100	49800	65000	54400	54800
(a)	5,551.3	5,532.8	5,511.4	5,505.0	5,502.1	5,494.2	5,490.3	5,537.4	5,562.8	5,559.0	5,546.3	5,550.0
(b)	-1,200	-14,000	-14,000	-3,800	-1,700	-4,300	-2,000	+29,000	+20,000	-3,000	-10,200	+3,000

CAL YR 1974 b -25,700
WTR YR 1975 b -2,200

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11416000 BOWMAN-SPAULDING CANAL INTAKE NEAR GRANITEVILLE, CALIF.

LOCATION.--Lat 39°26'26", long 120°39'30", in NW¼SW¼ sec.8, T.18 N., R.12 E., Nevada County, Tahoe National Forest, on left bank 0.6 mi (1.0 km) downstream from Bowman Dam, 4.5 mi (7.2 km) east of Graniteville, and 8.5 mi (13.7 km) south of Sierra City.

PERIOD OF RECORD.--October 1927 to current year. Prior to October 1970, published as Bowman-Spaulding Canal at intake or Bowman-Spaulding Canal intake, near Sierra City.

GAGE.--Water-stage recorder. Datum of gage is 5,390.39 ft (1,642.901 m) above mean sea level. Prior to July 1965 at site 0.3 mi (0.5 km) upstream at different datum.

AVERAGE DISCHARGE.--48 years, 157 ft^3/s (4.446 m^3/s), 113,700 acre-ft/yr (140 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 339 ft^3/s (9.60 m^3/s) July 24, 1973; no flow at times in most years.

REMARKS.--Records good. Canal diverts from left bank of Canyon Creek at diversion dam 500 ft (152 m) downstream from Bowman Dam. Water is diverted to Lake Spaulding and after passing through several powerhouses is used for irrigation by Nevada Irrigation District. See schematic diagram of Yuba River basin.

REVISIONS (WATER YEARS).--WSP 1395: 1935-36, 1940.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	305	301	302	294	114	52	230	233	5.4	269	291	307
2	304	297	301	299	115	52	240	227	5.2	269	290	307
3	304	297	301	298	114	51	249	202	6.4	269	287	307
4	304	301	281	297	114	51	248	180	5.4	269	286	305
5	304	305	301	295	142	51	248	195	5.4	268	286	307
6	304	305	302	283	167	52	246	210	5.0	108	285	309
7	302	305	301	266	188	81	246	130	6.5	2.2	282	309
8	302	302	299	257	206	101	246	60	6.5	2.0	290	308
9	302	302	301	226	194	101	245	61	5.5	1.9	292	309
10	302	306	302	201	180	100	244	62	5.0	1.9	294	309
11	302	306	304	160	138	135	245	31	73	4.5	295	305
12	301	305	309	140	112	194	245	5.4	119	6.0	302	304
13	301	305	308	139	155	215	246	5.4	118	5.5	307	304
14	302	304	306	98	137	215	248	5.6	120	5.8	304	304
15	302	305	305	65	108	215	248	5.4	126	5.8	303	304
16	302	305	304	62	107	215	248	5.4	133	5.2	303	304
17	302	304	304	64	107	214	248	5.4	153	3.9	300	304
18	302	302	302	62	84	213	248	5.6	177	3.5	300	304
19	309	299	301	62	67	215	248	5.6	200	3.3	302	304
20	308	299	301	62	67	213	249	5.4	216	3.3	300	305
21	308	301	299	62	67	213	250	5.4	226	3.1	299	305
22	308	298	297	62	66	213	250	5.4	229	3.1	299	304
23	308	301	295	62	66	210	250	5.6	230	78	300	304
24	306	304	294	62	64	214	233	5.6	224	239	307	304
25	304	304	294	62	62	218	212	5.4	236	302	313	305
26	304	302	292	63	55	213	239	5.4	244	302	305	305
27	305	301	291	63	51	222	249	5.4	253	300	307	307
28	309	299	294	62	52	232	250	5.4	257	299	309	307
29	306	299	294	62	---	231	251	5.2	263	296	308	305
30	306	301	292	62	---	231	251	5.2	270	295	305	305
31	305	---	292	93	---	231	---	5.4	---	294	305	---
TOTAL	9433	9065	9269	4345	3099	5164	7350	1699.6	3923.3	3914.0	9256	9170
MEAN	304	302	299	140	111	167	245	54.8	131	126	299	306
MAX	309	306	309	299	206	232	251	233	270	302	313	309
MIN	301	297	281	62	51	51	212	5.2	5.0	1.9	282	304
AC-FT	18710	17980	18390	8620	6150	10240	14580	3370	7780	7760	18360	18190

CAL YR 1974 TOTAL 84082.8 MEAN 230 MAX 309 MIN 3.4 AC-FT 166800
WTR YR 1975 TOTAL 75687.9 MEAN 207 MAX 313 MIN 1.9 AC-FT 150100

11416100 BOWMAN-SPAULDING CANAL AT JORDAN CREEK SIPHON VENTURI, NEAR EMIGRANT GAP, CALIF.

LOCATION.--Lat 39°20'32", long 120°38'20", in SW¼NW¼ sec.16, T.17 N., R.12 E., Nevada County, at outlet of Jordan Creek siphon 0.6 mi (1.0 km) downstream from Fuller Lake, and 3.5 mi (5.6 km) northeast of Emigrant Gap.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,440 ft (1,658 m), from topographic map.

AVERAGE DISCHARGE.--11 years, 234 ft^3/s (6.627 m^3/s), 169,500 acre-ft/yr (209 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 330 ft^3/s (9.35 m^3/s) Dec. 22, 1964; no flow at times in most years.

REMARKS.--Records show water diverted from Bowman Lake (see sta 11415500) plus numerous small tributaries before it enters Lake Spaulding (see sta 11414140). See schematic diagram of Yuba River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	302	312	293	285	98	77	276	297	303	318	316	304
2	301	307	292	286	133	89	275	301	298	319	317	304
3	302	304	297	287	152	91	286	315	299	316	315	304
4	301	304	308	289	129	90	292	307	297	314	311	303
5	302	305	304	288	141	88	295	277	295	313	312	303
6	308	306	303	289	170	89	288	276	297	202	311	304
7	303	305	294	292	178	130	277	204	289	46	309	304
8	303	307	294	291	202	160	278	162	265	45	307	304
9	302	304	294	262	220	153	271	234	246	27	308	304
10	305	308	293	213	219	142	272	243	229	0	309	304
11	307	305	293	176	162	156	272	251	253	0	307	305
12	305	306	297	159	124	186	269	254	298	0	307	304
13	305	306	305	155	186	227	273	287	306	0	308	303
14	306	303	303	107	202	236	277	291	307	0	309	302
15	307	301	297	49	153	234	283	324	305	0	309	302
16	303	301	293	53	131	239	279	310	299	.63	309	302
17	301	298	295	55	126	235	273	309	300	1.0	308	303
18	300	301	294	59	86	233	271	319	300	1.0	309	303
19	301	302	293	55	94	231	270	317	302	1.0	316	302
20	298	299	292	55	113	236	271	291	303	1.0	317	302
21	299	304	291	57	77	238	278	251	308	1.0	312	302
22	310	307	291	60	72	246	282	223	311	1.4	310	302
23	309	298	287	52	74	239	290	235	314	45	309	302
24	281	298	287	60	76	234	294	270	312	239	307	302
25	313	300	286	61	77	299	318	296	311	324	308	303
26	306	297	284	64	76	315	301	304	313	320	308	302
27	303	296	287	54	76	296	296	311	314	319	306	302
28	312	294	287	59	75	276	296	314	314	317	306	302
29	313	293	285	59	---	275	300	316	313	315	306	302
30	309	292	284	58	---	277	306	318	317	314	305	302
31	311	---	285	66	---	277	---	308	---	313	304	---
TOTAL	9420	9063	9088	4355	3614	6294	8509	8717	8910	4413.03	9595	9087
MEAN	304	302	293	140	129	203	284	281	297	142	310	303
MAX	313	312	308	292	220	315	318	324	317	324	317	305
MIN	281	292	284	49	72	77	269	162	229	0	304	302
AC-FT	18680	17980	18030	8640	7170	12480	16880	17290	17670	8750	19030	18020

CAL YR 1974 TOTAL 102592.00 MEAN 281 MAX 320 MIN 0 AC-FT 203500
WTR YR 1975 TOTAL 91065.03 MEAN 249 MAX 324 MIN 0 AC-FT 180600

11416500 CANYON CREEK BELOW BOWMAN LAKE, CALIF.

LOCATION.--Lat 39°26'23", long 120°39'39", in NE¼SE¼ sec.7, T.18 N., R.12 E., Nevada County, on left bank 1 mi (1.6 km) downstream from Bowman Dam, 3 mi (5 km) upstream from Texas Creek, and 9 mi (14 km) south of Sierra City.

DRAINAGE AREA.--28.3 mi² (73.3 km²).

PERIOD OF RECORD.--January 1927 to current year.

GAGE.--Water-stage recorder and concrete control. Concrete control covered with rocks Jan. 22, 1970. Altitude of gage is 5,100 ft (1,554 m), from topographic map.

AVERAGE DISCHARGE.--48 years, 38.4 ft³/s (1.087 m³/s), 27,820 acre-ft/yr (34.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 537 ft³/s (15.2 m³/s) June 15 (gage height, 5.76 ft or 1.756 m); minimum daily, 2.1 ft³/s (0.06 m³/s) Nov. 15-17, Nov. 28 to Dec. 2.

Period of record: Maximum discharge, 3,740 ft³/s (106 m³/s) Jan. 22, 1970 (gage height, 9.42 ft or 2.871 m in gage well, 10.32 ft or 3.416 m, from floodmarks), from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of slope-area measurement of maximum flow; no flow at times.

REMARKS.--Records good. Flow regulated by French Lake, usable capacity, 13,840 acre-ft (17.1 hm³), Bowman Lake (see sta 11415500), several smaller reservoirs, and diversion into Bowman-Spaulding Canal (see sta 11416000). See schematic diagram of Yuba River basin.

REVISIONS (WATER YEARS).--WSP 1315-A: 1930(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	3.6	2.1	2.2	2.6	5.0	3.3	7.8	3.0	2.8	2.8	3.6
2	4.6	3.3	2.1	2.2	2.6	4.8	3.2	9.0	2.8	2.8	2.8	3.6
3	4.6	3.3	7.1	2.2	2.6	4.4	3.4	10	3.2	2.8	2.8	3.6
4	4.4	3.3	7.3	2.4	2.6	4.0	3.6	8.1	2.4	2.8	2.8	3.7
5	4.4	3.3	3.6	2.4	2.6	4.2	3.6	6.1	2.7	3.2	2.7	3.8
6	4.4	3.3	3.0	4.4	2.6	4.8	3.4	6.4	3.3	5.8	2.7	3.8
7	4.4	3.0	2.7	6.6	2.8	5.4	3.3	7.5	3.3	9.3	2.8	4.2
8	4.2	2.6	2.7	8.5	5.0	5.0	3.3	9.0	3.2	11	3.2	4.7
9	4.2	2.4	2.6	4.0	9.3	4.0	3.3	10	3.0	8.4	3.3	4.9
10	4.2	2.4	2.6	3.4	5.0	3.4	3.3	10	3.0	9.6	3.3	5.0
11	4.2	2.4	2.6	3.0	4.2	3.0	3.6	10	3.0	20	3.2	5.1
12	4.2	2.2	2.7	3.0	5.4	3.0	4.8	10	3.0	93	3.2	5.1
13	4.2	2.2	2.8	2.8	9.0	3.0	5.2	10	3.0	115	3.3	5.1
14	4.2	2.2	2.7	2.8	6.4	3.0	5.6	9.9	33	102	3.3	5.1
15	4.2	2.1	2.7	2.8	4.8	2.8	5.2	7.8	327	99	3.3	5.3
16	4.2	2.1	2.7	2.8	4.2	3.0	4.6	7.8	510	137	3.3	5.3
17	4.4	2.1	2.6	2.8	4.0	2.7	4.4	8.4	338	87	3.4	5.4
18	4.4	2.6	2.6	2.8	3.8	2.7	4.4	8.4	170	84	3.8	4.5
19	4.4	2.4	2.4	3.0	4.4	3.8	4.8	7.5	96	80	4.2	3.5
20	4.4	2.4	2.4	3.0	5.4	4.4	5.2	5.4	3.6	75	3.8	3.5
21	4.4	4.5	2.7	3.0	4.2	5.8	6.4	4.2	3.3	61	3.6	3.5
22	4.4	3.4	2.7	3.0	4.0	8.9	6.9	4.8	18	56	3.6	3.5
23	4.4	2.6	2.6	3.0	4.0	2.8	6.1	5.6	125	27	3.6	3.6
24	3.8	2.4	2.6	3.0	4.0	4.9	14	5.6	62	5.6	3.6	3.5
25	3.3	2.6	2.4	3.0	3.6	23	9.3	5.2	3.4	4.0	3.6	3.7
26	3.3	2.2	2.4	3.2	3.6	5.0	6.1	4.8	3.3	3.4	3.6	3.7
27	3.4	2.2	2.6	3.0	4.0	3.6	6.1	4.2	3.2	3.3	3.6	3.7
28	4.8	2.1	2.4	2.8	5.2	4.4	6.9	4.0	3.0	3.2	3.6	3.7
29	3.6	2.1	2.4	2.7	---	3.2	7.5	3.8	3.0	3.2	3.6	3.7
30	3.4	2.1	2.2	2.6	---	3.4	7.5	3.4	3.0	3.0	3.6	3.7
31	3.8	---	2.2	2.6	---	3.8	---	3.2	---	3.0	3.6	---
TOTAL	129.2	79.4	89.2	99.0	121.9	145.2	158.3	217.9	1743.7	1123.2	103.6	125.1
MEAN	4.17	2.65	2.88	3.19	4.35	4.68	5.28	7.03	58.1	36.2	3.34	4.17
MAX	4.8	4.5	7.3	8.5	9.3	23	14	10	510	137	4.2	5.4
MIN	3.3	2.1	2.1	2.2	2.6	2.7	3.2	3.2	2.4	2.8	2.7	3.5
AC-FT	256	157	177	196	242	288	314	432	3460	2230	205	248

CAL YR 1974 TOTAL 13934.0 MEAN 38.2 MAX 542 MIN 1.0 AC-FT 27640
WTR YR 1975 TOTAL 4135.7 MEAN 11.3 MAX 510 MIN 2.1 AC-FT 8200

11417500 SOUTH YUBA RIVER AT JONES BAR, NEAR GRASS VALLEY, CALIF.

LOCATION.--Lat 39°17'32", long 121°06'13", in NW¼SE¼ sec.32, T.17 N., R.8 E., Nevada County, on left bank at Jones Bar, 100 ft (30 m) upstream from Rush Creek, 0.9 mi (1.4 km) downstream from bridge on State Highway 49, and 5 mi (8 km) northwest of Grass Valley.

DRAINAGE AREA.--308 mi² (798 km²).

PERIOD OF RECORD.--October 1940 to September 1948, April 1959 to current year. Published as South Fork Yuba River at Jones Bar 1940-48 and as South Yuba River at Jones Bar 1959-63.

GAGE.--Water-stage recorder. Altitude of gage is 1,060 ft (323 m), from river-profile map. Oct. 1, 1940, to Sept. 30, 1948, at site 150 ft (46 m) upstream at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--24 years, 478 ft³/s (13.54 m³/s), 346,300 acre-ft/yr (427 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,560 ft³/s (186 m³/s) Mar. 25 (gage height, 11.79 ft or 3.594 m); minimum daily, 42 ft³/s (1.19 m³/s) Oct. 18.

Period of record: Maximum discharge, 53,600 ft³/s (1,520 m³/s) Dec. 22, 1964 (gage height, 25.0 ft or 7.62 m, from floodmarks), from rating curve extended above 23,000 ft³/s (651 m³/s) on basis of slope-area measurement of maximum flow; minimum, 1.0 ft³/s (0.028 m³/s) Sept. 10-13, 1944.

Flood of Dec. 23, 1955, reached a stage of 30.7 ft (9.36 m), from floodmarks, present datum, at site 100 ft (30 m) upstream.

REMARKS.--Records good. Flow regulated by Lake Spaulding (see sta 11414040), Fordyce Lake, capacity, 46,700 acre-ft (57.6 hm³), Bowman Lake (see sta 11415500), and many smaller reservoirs. Diversions into and out of basin for several powerhouses and for irrigation of about 20,000 acres (80.9 km²) by the Nevada Irrigation District. See schematic diagram of Yuba River basin.

REVISIONS (WATER YEARS).--WSP 1315-A: 1942-43(M), drainage area at former site. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	94	62	74	365	475	686	623	780	401	59	56
2	44	73	62	72	934	516	618	636	686	275	56	56
3	45	63	138	74	496	519	599	741	942	235	57	56
4	46	60	532	83	686	451	618	871	1500	205	54	56
5	50	59	206	86	345	445	658	676	2150	187	53	55
6	48	57	133	636	279	533	607	597	2430	172	55	55
7	46	62	102	550	360	908	594	585	2670	183	54	55
8	46	77	89	1090	568	1960	561	611	1990	150	52	54
9	50	69	82	430	1940	1260	563	663	1840	146	53	54
10	51	62	77	261	1470	919	596	714	1680	140	51	53
11	48	58	76	200	634	730	586	756	1670	136	51	52
12	46	57	74	168	1410	596	608	810	1940	156	50	56
13	46	57	88	150	3600	561	628	838	2150	228	53	54
14	46	56	85	137	1410	544	673	903	2250	227	54	52
15	45	54	77	129	815	533	643	914	2200	210	56	51
16	46	53	76	123	600	682	584	783	2050	236	55	50
17	48	53	72	119	481	540	534	782	1830	265	54	48
18	42	57	69	114	403	558	494	874	1300	193	57	48
19	46	63	67	116	564	721	488	915	600	188	85	49
20	46	59	67	118	1000	925	470	786	238	177	100	49
21	46	86	66	117	603	866	500	595	178	166	137	48
22	46	181	71	116	481	990	534	539	158	150	86	47
23	47	105	73	111	418	770	536	539	163	142	73	45
24	48	78	67	107	394	1130	836	596	794	108	68	45
25	48	82	66	104	391	4740	1330	626	631	74	64	44
26	48	81	65	107	385	2000	849	622	330	69	62	44
27	50	74	104	108	385	1360	716	626	265	64	59	43
28	122	69	208	97	433	1020	669	613	323	60	58	43
29	124	65	112	93	---	874	643	631	408	59	58	74
30	72	62	92	91	---	774	644	637	490	56	58	56
31	76	---	82	97	---	738	---	682	---	57	57	---
TOTAL	1658	2126	3240	5878	21850	29630	19065	21784	36636	5115	1939	1548
MEAN	53.5	70.9	105	190	780	956	636	703	1221	165	62.5	51.6
MAX	124	181	532	1090	3600	4740	1330	915	2670	401	137	74
MIN	42	53	62	72	279	445	470	539	158	56	50	43
AC-FT	3290	4220	6430	11660	43340	58770	37820	43210	72670	10150	3850	3070

CAL YR 1974 TOTAL 206481 MEAN 566 MAX 6680 MIN 42 AC-FT 409600
WTR YR 1975 TOTAL 150469 MEAN 412 MAX 4740 MIN 42 AC-FT 298500

11417500 SOUTH YUBA RIVER AT JONES BAR, NEAR GRASS VALLEY, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: February 1965 to current year.
Sediment records: Water years 1967 to September 1974 (partial-record station).

EXTREMES.--Current year:
Water temperatures: Maximum, 26.5°C July 26.
Period of record: Water temperatures: Maximum, 27.5°C July 15-17, 1972, Aug. 1-5, 1974; minimum (1965-74), freezing point on several days in most years.

REMARKS.--Clock stopped Mar. 16 to Apr. 10; range in temperature, 4.0°C to 8.5°C.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	15.5	11.5	10.0	4.5	4.0	---	---	3.5	1.0	8.5	8.0
2	18.0	16.5	10.0	8.5	---	---	---	---	4.0	3.5	9.0	7.5
3	18.0	16.5	9.0	8.0	---	---	---	---	5.0	3.5	8.0	6.5
4	18.0	16.5	9.0	7.5	---	---	---	---	6.0	5.0	8.5	7.0
5	17.0	15.0	9.0	7.5	---	---	---	---	6.0	5.0	8.5	8.0
6	16.0	14.0	8.5	7.5	---	---	---	---	7.0	6.0	8.5	8.0
7	16.0	14.0	9.0	8.5	---	---	---	---	8.0	7.0	8.0	7.5
8	17.0	15.0	9.0	8.0	---	---	---	---	8.0	7.5	7.5	7.0
9	17.0	15.5	8.5	7.5	---	---	5.5	4.5	8.0	7.0	8.0	7.5
10	16.0	14.5	8.5	7.0	---	---	5.0	4.0	7.5	7.0	8.0	7.0
11	15.5	14.0	8.5	7.5	---	---	4.5	3.5	8.0	7.0	8.5	7.0
12	15.0	13.5	8.5	7.5	---	---	3.5	3.0	7.5	7.5	7.5	6.5
13	14.5	13.0	8.5	8.0	---	---	3.5	3.0	8.0	7.5	7.0	5.0
14	14.0	12.5	9.0	8.0	---	---	3.5	2.5	8.0	6.5	7.0	5.0
15	14.0	12.5	9.0	8.0	---	---	4.0	2.5	6.5	5.5	7.0	6.0
16	14.0	12.5	9.0	8.0	---	---	4.0	3.0	6.5	5.5	---	---
17	14.0	13.0	9.5	9.0	---	---	4.0	3.5	6.0	5.0	---	---
18	14.0	13.0	10.5	9.5	---	---	5.0	4.0	6.0	4.5	---	---
19	14.0	13.0	9.5	8.5	---	---	5.0	4.0	7.5	6.0	---	---
20	14.0	12.5	9.0	8.0	---	---	5.5	4.5	7.5	6.0	---	---
21	13.5	12.0	10.0	9.0	---	---	5.5	4.5	6.0	5.0	---	---
22	12.5	11.0	9.0	7.5	---	---	5.5	4.5	6.0	4.0	---	---
23	12.0	11.0	7.5	7.0	---	---	5.5	4.5	7.0	5.0	---	---
24	12.0	11.0	7.5	6.5	---	---	6.0	5.0	7.5	6.0	---	---
25	12.5	11.0	7.5	7.0	---	---	6.5	5.5	8.5	6.5	---	---
26	12.5	11.5	7.0	6.5	---	---	6.5	5.0	8.5	7.0	---	---
27	12.5	11.5	6.5	5.5	---	---	5.0	3.0	9.5	8.0	---	---
28	12.5	11.5	6.0	5.0	---	---	3.0	2.0	10.0	8.5	---	---
29	12.0	10.5	5.5	4.5	---	---	3.0	2.0	---	---	---	---
30	11.0	10.0	5.0	4.5	---	---	2.0	1.0	---	---	---	---
31	11.0	10.5	---	---	---	---	1.5	1.0	---	---	---	---
MONTH	18.0	10.0	11.5	4.5	---	---	---	---	10.0	1.0	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	12.0	9.0	17.0	15.0	17.5	14.5	24.0	22.0	21.0	17.5
2	---	---	12.0	10.0	16.5	14.5	19.0	14.5	25.0	22.5	21.0	17.5
3	---	---	11.0	8.5	16.0	14.0	20.0	16.0	25.0	22.0	21.5	18.0
4	---	---	9.0	7.0	16.0	13.0	20.0	16.5	25.0	21.5	22.0	18.5
5	---	---	9.0	6.0	16.0	12.5	21.5	17.0	24.5	21.0	22.5	19.0
6	---	---	10.5	7.5	16.0	11.5	22.0	18.0	24.0	21.0	23.0	19.5
7	---	---	12.0	9.5	15.5	11.0	23.0	18.5	23.0	19.5	23.0	20.0
8	---	---	13.0	10.5	15.5	11.5	23.5	19.5	24.0	19.5	23.0	20.0
9	---	---	13.0	11.0	16.0	12.5	23.5	20.0	24.0	20.0	23.5	21.0
10	---	---	12.5	11.5	16.0	13.0	23.0	20.5	24.0	20.5	22.0	20.5
11	9.5	7.0	13.0	11.5	15.0	12.0	24.5	20.5	24.0	20.5	22.0	19.0
12	10.0	7.5	13.5	11.5	15.5	12.0	24.0	20.5	24.0	20.5	22.0	19.5
13	10.5	8.5	13.5	11.5	15.5	12.0	24.0	20.5	24.0	20.5	22.5	20.0
14	10.0	7.0	13.5	12.0	16.0	12.0	23.5	20.0	23.5	20.5	22.0	19.5
15	7.5	6.5	12.5	11.0	15.5	11.5	21.0	19.5	23.5	20.0	22.0	19.5
16	7.5	5.5	13.0	10.5	15.5	11.5	22.5	19.0	23.5	20.0	22.0	19.5
17	8.5	5.5	14.5	12.0	15.0	12.0	22.5	19.5	22.0	20.0	22.0	19.5
18	9.5	7.0	14.5	12.5	14.0	11.5	23.5	19.5	21.0	19.5	22.5	20.0
19	10.5	8.0	13.5	11.5	15.0	12.5	24.0	20.0	20.5	19.0	22.0	19.5
20	11.0	8.5	11.5	9.5	19.0	14.0	24.0	20.5	21.5	17.5	22.0	19.5
21	12.0	9.5	12.0	8.5	20.5	16.0	24.5	21.0	20.5	18.5	21.5	19.5
22	10.5	9.5	13.5	10.5	21.0	17.0	24.5	21.0	21.5	18.0	21.5	19.0
23	9.5	9.5	15.0	12.0	20.5	18.0	25.0	21.5	21.5	18.5	21.0	18.5
24	9.5	7.0	16.0	13.5	18.5	12.5	25.5	23.0	22.5	19.0	21.0	18.5
25	7.0	5.5	15.5	13.0	14.5	11.0	25.0	22.5	23.5	20.0	20.5	18.0
26	7.5	5.5	15.5	13.0	18.0	13.0	26.5	22.0	23.5	20.5	20.5	17.5
27	9.5	7.0	15.5	13.0	18.5	14.5	26.0	22.5	22.5	20.0	19.0	17.0
28	10.5	8.5	16.0	13.5	19.5	15.5	26.0	23.0	22.0	19.0	18.5	16.5
29	11.0	8.5	16.0	13.5	18.0	15.5	25.0	22.5	21.5	18.5	18.5	16.0
30	11.5	9.5	16.0	13.5	17.5	15.0	24.0	22.5	21.5	18.5	18.5	16.0
31	---	---	16.5	14.5	---	---	23.5	22.0	21.0	18.0	---	---
MONTH	---	---	16.5	6.0	21.0	11.0	26.5	14.5	25.0	17.5	23.5	16.0

11418000 YUBA RIVER BELOW ENGLEBRIGHT DAM, NEAR SMARTVILLE, CALIF.

LOCATION.--Lat 39°14'07", long 121°16'23", in NW¼NW¼ sec.23, T.16 N., R.6 E., Yuba County, on right bank 2,000 ft (610 m) downstream from Englebright Dam, 0.5 mi (0.8 km) upstream from Deer Creek, and 2.3 mi (3.7 km) northeast of Smartville.
DRAINAGE AREA.--1,108 mi^2 (2,870 km^2).
PERIOD OF RECORD.--October 1941 to current year. Prior to October 1953, published as "at Narrows Dam." October 1953 to Sept. 30, 1969, published as "at Englebright Dam." If records for Deer Creek near Smartville (sta 11418500) since 1941 are added to records at this station, records equivalent to those published from 1903 to 1941 as Yuba River at Smartville (sta 11419000) can be obtained.
GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 278.68 ft (84.942 m) above mean sea level (levels by International Engineering Co.). Prior to Sept. 19, 1958, at site 2,000 ft (610 m) upstream at datum 248.31 ft (75.685 m) higher and Sept. 19, 1958, to Sept. 30, 1969, at datum 278.68 ft (84.942 m) lower. Supplementary gage 2,000 ft (610 m) upstream since Oct. 1, 1969, at Englebright Dam at datum 248.31 ft (75.685 m) higher.
AVERAGE DISCHARGE.--34 years, 2,576 ft^3/s (72.95 m^3/s), 1,866,000 acre-ft/yr (2.30 km^3/yr).
EXTREMES.--Current year: Maximum discharge, 6,780 ft^3/s (192 m^3/s) June 16 (gage height, 10.57 ft or 3.222 m); minimum daily, 329 ft^3/s (9.32 m^3/s) Oct. 4.
Period of record: Maximum discharge, 171,000 ft^3/s (4,840 m^3/s) Dec. 22, 1964 (gage height, 546.14 ft or 166.463 m, site and datum then in use); no flow through powerplant, from rating curve extended above 25,000 ft^3/s (708 m^3/s) on basis of computation of peak flow over spillway of dam at gage heights 544.72 ft (166.031 m) and 546.14 ft (166.463 m); no flow at times in 1942, 1949, 1956, 1958-61, 1968-69.
REMARKS.--Records good. Diversions out of basin for power and irrigation above station up to 1,800 ft^3/s (51.0 m^3/s), see sta 11413250, 11414190, 11414200. Flow regulated by Lake Spaulding beginning in 1912 (see sta 11414140), Jackson Meadows Reservoir (see sta 11407800) since November 1964, New Bullards Bar Reservoir (see sta 11413515) since January 1969, Englebright Reservoir beginning in 1941, capacity, 70,000 acre-ft (86.3 hm^3), Bowman Lake (see sta 11415500), Fordyce Lake beginning in 1926, capacity, 46,700 acre-ft (57.6 hm^3), and many smaller reservoirs. See schematic diagram of Yuba River basin.
REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	332	637	4110	3540	1100	1490	3610	2190	3500	1810	2790	2820
2	332	639	4090	3520	1910	1510	4190	1800	4130	2040	2790	2830
3	332	639	4080	3520	2050	2070	4190	1120	4130	1940	2110	2810
4	329	639	4070	3520	1630	2560	4190	1070	4150	1830	2800	2810
5	340	639	4060	3520	1600	2510	4190	1600	4180	1830	2800	2810
6	338	639	4050	3610	1570	2490	4190	1200	4220	1830	2800	2820
7	403	639	3810	4080	1130	2070	4170	1170	4260	1840	2800	2820
8	519	639	3500	4130	1130	1560	4060	1180	4500	1820	2800	2820
9	633	639	4030	4120	2770	1870	4040	1210	5260	1810	2790	2810
10	600	639	3750	4120	2740	2300	4190	1250	5230	1830	2800	2810
11	619	639	3490	4110	1230	2480	4190	1130	5340	1840	2800	2810
12	633	642	3460	3640	1550	2460	4190	1700	5020	1830	2800	2810
13	634	645	3500	3430	4230	2500	3640	1880	5270	1830	2800	2810
14	634	641	3520	2540	3740	2490	4130	1870	5740	1830	2800	2800
15	637	639	3490	1840	2190	2500	4180	1870	5790	1830	2810	2790
16	639	639	3520	1830	1250	2490	4180	1880	6030	1830	2810	2800
17	625	755	3510	1830	1090	2720	4180	1880	5290	1830	2800	2800
18	616	1200	3520	1830	1080	2950	4170	1880	4820	1830	2800	2800
19	625	1440	3450	1820	1090	2960	4150	2350	4250	1840	2800	2810
20	629	1770	3570	1810	1830	3020	4140	2840	3680	1830	2800	2810
21	628	2090	3560	1830	2320	3000	4120	2820	2760	2210	2810	2790
22	628	2340	3470	1850	2330	3000	4120	2810	2520	2840	2810	2780
23	628	2650	3410	1860	2320	3010	4100	2440	2060	2810	2820	2790
24	628	3110	3410	1850	2320	3300	3670	1110	1990	2810	2820	2800
25	628	3470	3410	1850	2310	2930	2850	1100	2920	2810	2820	2800
26	628	3900	3420	1840	2340	3540	1550	1090	2960	2810	2820	2800
27	629	4180	3480	1810	2350	4200	1540	2180	2090	2080	2820	2810
28	612	4170	3660	1540	1930	4200	2060	2880	1450	2790	2810	2810
29	618	4150	3720	1200	---	4030	2360	2890	1660	2780	2800	2810
30	634	4130	3760	1130	---	4020	2320	3680	1820	2780	2820	2800
31	634	---	3680	1100	---	3920	---	4180	---	2780	2820	---
TOTAL	17344	49588	113560	80220	55130	86150	110860	60250	117020	66400	86270	84190
MEAN	559	1653	3663	2588	1969	2779	3695	1944	3901	2142	2783	2806
MAX	639	4180	4110	4130	4230	4200	4190	4180	6030	2840	2820	2830
MIN	329	637	3410	1100	1080	1490	1540	1070	1450	1810	2110	2780
AC-FT	34400	98360	225200	159100	109400	170900	219900	119500	232100	131700	171100	167000

CAL YR 1974 TOTAL 1375769 MEAN 3769 MAX 32100 MIN 324 AC-FT 2729000
WTR YR 1975 TOTAL 926982 MEAN 2540 MAX 6030 MIN 329 AC-FT 1839000

11418000 YUBA RIVER BELOW ENGLEBRIGHT DAM, NEAR SMARTVILLE, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: October 1972 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 20.0°C Oct. 1, 3, 5, 7, 11; minimum, 5.5°C on several days during December and January.
Period of record:
Water temperatures: Maximum (1973 to current year), 20.0°C Oct. 1, 3, 5, 7, 11, 1974; minimum, 3.0°C Dec. 19, 20, 1973.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.0	19.0	11.5	11.0	7.0	6.5	5.5	5.5	7.0	6.5	7.5	7.5
2	19.5	19.0	11.5	10.5	7.0	6.5	6.0	5.5	7.0	7.0	7.5	7.5
3	20.0	19.0	11.5	10.5	6.5	6.5	6.0	5.5	7.0	6.5	8.0	7.5
4	19.5	19.0	11.5	10.5	6.5	6.5	6.0	5.5	6.5	6.5	8.0	7.5
5	20.0	19.0	11.0	10.5	6.5	6.5	6.0	5.5	7.0	6.5	7.5	7.5
6	19.5	19.0	11.0	10.5	6.5	6.5	6.0	6.0	7.0	6.5	7.5	7.5
7	20.0	19.0	11.0	11.0	7.0	6.5	6.0	6.0	7.0	7.0	7.5	7.0
8	19.5	19.0	11.0	10.5	6.5	6.5	6.0	5.5	7.5	7.0	7.5	7.0
9	19.5	19.0	11.0	10.5	6.5	6.5	6.5	6.0	7.0	6.5	7.5	7.0
10	19.5	19.0	11.0	10.0	6.5	6.5	6.5	6.5	7.0	6.5	8.0	7.0
11	20.0	19.0	11.0	10.0	6.5	6.5	6.5	6.5	7.5	7.0	8.5	7.5
12	19.5	18.5	10.5	10.0	6.5	6.0	7.0	6.5	7.5	7.0	8.5	8.0
13	19.0	17.5	10.5	10.0	6.5	6.0	7.0	6.5	7.5	7.0	8.0	8.0
14	18.0	16.0	10.5	10.0	6.5	6.5	6.5	6.5	8.0	7.0	8.5	7.5
15	17.0	15.0	10.5	10.0	6.5	6.0	7.0	6.5	8.0	7.5	7.5	7.5
16	16.0	14.0	10.0	10.0	6.5	6.0	7.0	6.5	8.0	7.5	7.5	7.5
17	15.5	13.5	10.0	9.5	6.5	6.5	7.0	6.5	8.0	7.5	8.0	7.5
18	15.0	13.5	9.5	9.0	6.5	6.5	7.0	6.5	7.5	7.5	8.0	7.5
19	14.5	13.0	9.5	9.0	6.5	6.0	7.0	6.5	7.5	7.5	7.5	7.0
20	14.0	13.0	9.0	8.5	6.5	6.0	7.0	7.0	7.5	7.0	7.5	7.5
21	14.0	12.5	8.5	8.0	6.0	6.0	7.0	7.0	7.5	7.5	7.5	7.0
22	14.0	12.5	8.5	8.0	6.0	6.0	7.0	6.5	7.5	7.0	7.5	7.0
23	13.5	12.0	8.0	8.0	6.0	6.0	7.0	7.0	7.5	7.0	7.5	7.0
24	13.5	12.0	8.0	7.5	6.0	6.0	7.0	7.0	7.0	7.0	7.5	7.0
25	13.0	11.5	7.5	7.5	6.0	6.0	7.0	7.0	7.5	7.0	8.0	7.0
26	13.0	11.5	7.5	7.5	6.0	6.0	7.0	7.0	7.5	7.0	7.5	7.0
27	12.5	11.5	7.5	7.0	6.0	5.5	7.0	7.0	7.0	7.0	8.0	7.5
28	11.5	11.0	7.0	7.0	6.0	6.0	7.0	7.0	7.5	7.0	8.0	7.5
29	12.0	11.5	7.0	7.0	6.0	6.0	7.0	7.0	---	---	8.0	7.5
30	12.0	11.0	7.0	7.0	6.0	5.5	7.0	7.0	---	---	7.5	7.5
31	11.5	11.0	---	---	6.0	5.5	7.0	6.5	---	---	8.0	7.5
MONTH	20.0	11.0	11.5	7.0	7.0	5.5	7.0	5.5	8.0	6.5	8.5	7.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.5	9.5	9.0	14.5	13.0	13.5	13.0	17.0	17.0	15.5	15.5
2	8.0	7.5	9.5	9.0	15.5	14.5	14.0	13.0	17.0	17.0	15.5	15.5
3	7.5	7.0	9.0	9.0	15.0	14.0	13.5	13.0	17.0	16.5	15.5	15.5
4	7.5	7.0	10.0	8.5	14.5	13.5	13.5	13.0	17.5	17.0	15.5	15.0
5	7.5	7.0	10.0	9.0	14.0	13.0	14.0	13.5	17.5	17.5	15.5	15.0
6	7.5	7.0	10.0	9.0	13.5	13.0	14.0	13.5	18.0	17.5	15.5	15.0
7	7.5	7.0	10.0	9.0	13.0	13.0	14.0	13.5	18.0	17.5	15.5	15.5
8	7.0	6.5	10.0	9.0	13.5	12.5	14.0	13.5	18.0	17.5	15.5	15.5
9	7.0	7.0	10.0	9.5	14.0	13.5	14.0	13.5	18.0	18.0	16.0	15.5
10	7.0	7.0	10.0	9.5	13.5	13.0	14.0	13.5	18.5	18.0	15.5	15.5
11	8.0	7.0	10.5	9.5	13.5	13.0	14.0	14.0	18.5	18.0	16.0	15.5
12	8.0	7.5	11.0	9.5	13.5	12.5	14.0	14.0	18.5	18.0	16.0	15.5
13	8.0	7.5	11.5	11.0	14.0	12.5	14.5	14.0	18.5	18.5	16.0	15.5
14	7.5	7.5	12.0	11.5	14.0	13.5	14.5	14.0	18.5	18.5	16.0	15.5
15	8.0	7.5	12.5	11.5	14.0	13.5	14.5	14.5	19.0	18.5	16.0	15.5
16	8.0	7.5	12.5	12.0	13.5	13.0	15.0	14.5	19.0	18.5	16.0	15.5
17	8.0	7.5	12.5	12.5	13.5	13.0	15.0	14.5	19.0	18.5	16.0	16.0
18	8.0	7.5	13.0	12.5	13.5	13.0	15.0	14.5	19.0	19.0	16.0	16.0
19	8.0	7.5	13.5	13.0	13.0	13.0	15.0	15.0	19.0	19.0	16.0	16.0
20	8.5	8.0	14.5	12.5	13.0	13.0	15.0	15.0	19.0	18.5	16.0	16.0
21	9.0	8.0	13.5	12.5	13.0	12.5	15.5	15.0	19.0	18.5	16.0	16.0
22	8.5	8.0	13.0	12.5	13.0	12.5	15.5	15.5	19.0	18.5	16.5	15.5
23	8.5	8.0	12.5	12.5	12.5	12.5	15.5	15.5	19.0	18.5	15.5	14.5
24	8.0	8.0	12.5	12.0	13.0	12.5	15.5	15.5	18.5	18.0	14.0	13.0
25	8.5	8.0	12.5	12.0	13.5	13.0	16.0	15.5	18.0	17.0	13.0	12.0
26	9.0	8.0	12.5	12.0	13.0	12.5	16.0	16.0	17.0	16.5	12.5	11.5
27	9.0	8.0	13.0	12.5	13.0	12.5	16.0	15.5	17.0	16.5	12.0	11.0
28	9.0	8.0	14.0	13.0	13.0	12.5	16.5	16.0	16.5	16.0	11.5	11.0
29	9.0	9.0	14.0	13.5	13.0	12.5	16.5	16.5	16.0	15.5	11.0	10.5
30	9.5	9.0	14.5	13.5	13.5	13.0	17.0	16.5	16.0	15.5	11.0	10.5
31	---	---	15.0	14.5	---	---	17.0	16.5	15.5	15.5	---	---
MONTH	9.5	6.5	15.0	8.5	15.5	12.5	17.0	13.0	19.0	15.5	16.5	10.5

11418500 DEER CREEK NEAR SMARTVILLE, CALIF.

LOCATION.--Lat 39°13'28", long 121°16'03", in SW¼SE¼ sec.23, T.16 N., R.6 E., Nevada County, on left bank 400 ft (122 m) upstream from county road bridge, 0.9 mi (1.4 km) upstream from mouth, and 2 mi (3 km) northeast of Smartville.

DRAINAGE AREA.--84.6 mi² (219.1 km²).

PERIOD OF RECORD.--June 1935 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 630 ft (192 m), from river-profile map. June 21, 1935, to Nov. 30, 1938, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--40 years, 133 ft³/s (3.767 m³/s), 96,360 acre-ft/yr (119 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,580 ft³/s (130 m³/s) Feb. 12 (gage height, 9.21 ft or 2.807 m); minimum daily, 2.9 ft³/s (0.082 m³/s) July 24, 26, Aug. 13.

Period of record: Maximum discharge, 11,600 ft³/s (329 m³/s) Oct. 13, 1962 (gage height, 13.77 ft or 4.197 m), from rating curve extended above 5,200 ft³/s (147 m³/s); minimum daily, 0.1 ft³/s (0.003 m³/s) Aug. 4-6, 15, 1940.

Flood of March 1928 reached a stage of 14.5 ft (4.42 m), from floodmarks (discharge, 14,000 ft³/s or 396 m³/s).

REMARKS.--Records good. Natural flow of stream is affected by Scotts Flat Reservoir beginning in 1949, usable capacity, 26,300 acre-ft (32.4 hm³), increased to 49,000 acre-ft (60.4 hm³) in July 1964, Deer Creek Reservoir, capacity, 1,400 acre-ft (1.73 hm³), Lake Wildwood, capacity, 3,840 acre-ft (4.73 hm³) beginning in 1970, power developments, and diversion for irrigation. At times water from South Yuba River is diverted to Deer Creek and water from Deer Creek is diverted to Bear River. See schematic diagram of Yuba River basin.

REVISIONS.--WSP 1395: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	33	14	21	575	53	280	123	23	3.8	3.4	6.4
2	4.6	18	14	19	1370	65	250	112	23	4.1	3.3	6.2
3	4.8	14	60	17	596	53	232	122	20	4.2	3.6	5.9
4	5.4	13	100	19	932	47	309	157	17	4.6	3.5	5.7
5	5.4	13	38	20	243	51	573	141	15	5.1	3.2	5.3
6	5.1	14	27	364	159	74	519	121	13	4.9	3.1	5.2
7	4.8	15	22	343	132	270	429	107	13	4.3	3.1	4.8
8	4.9	29	19	689	318	652	362	97	12	3.8	3.6	5.0
9	5.3	19	18	131	1290	257	297	90	11	3.7	4.1	5.3
10	6.0	15	17	62	709	165	245	82	8.3	3.5	3.9	5.0
11	5.8	14	17	46	213	120	207	75	8.9	3.7	3.2	5.5
12	4.8	13	17	37	1180	92	189	69	9.1	3.9	3.0	5.5
13	4.9	12	19	31	2010	104	190	66	8.4	4.1	2.9	5.5
14	4.8	10	17	28	454	182	175	64	7.7	3.9	3.0	5.7
15	5.1	13	17	27	230	246	186	59	8.4	3.8	2.9	5.9
16	5.6	13	18	29	159	647	177	84	9.1	5.5	4.3	5.7
17	5.2	14	16	26	124	318	161	105	7.7	5.6	4.4	4.6
18	5.0	17	15	23	101	302	139	106	6.0	5.0	6.2	4.8
19	4.5	15	15	19	171	411	126	103	6.0	3.7	8.3	5.5
20	4.6	13	15	19	210	414	118	115	6.6	3.7	7.3	5.5
21	4.6	39	15	19	115	691	110	127	6.9	3.4	7.1	6.2
22	4.9	24	15	18	89	927	98	102	6.6	3.3	8.3	19
23	4.8	16	15	18	78	423	104	55	5.7	3.2	8.6	34
24	5.0	24	13	18	70	661	199	44	5.5	2.9	8.8	19
25	4.8	24	14	18	65	2320	356	38	7.7	3.0	7.5	4.1
26	4.6	16	16	18	59	1010	276	31	7.1	2.9	6.6	3.6
27	4.8	12	47	23	57	657	206	25	5.5	3.1	6.4	3.6
28	24	13	354	12	51	498	169	20	5.0	3.4	6.2	4.3
29	33	13	75	16	---	425	147	21	4.7	3.2	6.4	4.6
30	14	13	37	18	---	370	132	19	4.0	3.8	6.4	15
31	26	---	24	27	---	316	---	21	---	3.6	6.4	---
TOTAL	232.0	511	1120	2175	11752	12821	6955	2501	291.9	120.7	159.0	222.4
MEAN	7.48	17.0	36.1	70.2	420	414	232	80.7	9.73	3.89	5.13	7.41
MAX	33	39	354	689	2010	2320	573	157	23	5.6	8.8	34
MIN	4.5	10	13	12	51	47	98	19	4.0	2.9	2.9	3.6
AC-FT	460	1010	2220	4310	23310	25430	13800	4960	579	239	315	441
(a)	33,666	35,122	35,668	37,306	44,193	48,547	48,547	48,547	47,243	44,060	41,069	38,409

CAL YR 1974 TOTAL 65745.2 MEAN 180 MAX 2470 MIN 2.8 AC-FT 130400
WTR YR 1975 TOTAL 38861.0 MEAN 106 MAX 2320 MIN 2.9 AC-FT 77080

a Contents, in acre-feet, at end of month for Scotts Flat Reservoir, furnished by Nevada Irrigation District.

11418500 DEER CREEK NEAR SMARTVILLE, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: October 1973 to current year.
Sediment records: October 1973 to current year.

EXTREMES.--Current year:
Sediment concentrations: Maximum daily, 126 mg/l Mar. 25; minimum daily, 1 mg/l on many days.
Sediment discharge: Maximum daily, 1,100 tons (998 tonnes) Mar. 25; minimum daily, 0.01 ton (0.01 tonne) on many days.
Period of record:
Sediment concentrations: Maximum daily, 168 mg/l Mar. 1, 1974; minimum daily, 1 mg/l on many days each year.
Sediment discharge: Maximum daily, 1,700 tons (1,540 tonnes) Mar. 1, 1974; minimum daily, 0.01 ton (0.01 tonne) on many days each year.

REMARKS.--Miscellaneous chemical analyses published for this station for 1959 water year.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975 (ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.0	4.0	6.5	11.5	10.0	---	25.0	24.0	28.0	21.0
2	21.0	---	9.0	5.0	6.5	13.0	11.0	16.5	---	22.0	---	---
3	---	12.0	10.0	5.0	7.0	13.5	9.5	14.0	24.5	24.0	29.0	24.0
4	18.0	---	10.0	7.0	6.5	13.5	10.0	---	25.0	---	---	---
5	15.5	12.0	10.5	6.0	7.0	12.0	8.0	16.0	---	---	28.5	25.5
6	---	---	9.5	8.5	8.0	12.0	9.0	16.0	---	---	---	---
7	19.0	11.0	---	8.0	8.5	11.0	9.0	17.0	24.5	28.0	27.0	---
8	---	---	7.5	---	10.0	11.0	9.5	17.0	---	---	---	---
9	20.0	11.0	7.5	7.0	9.0	10.0	10.5	19.0	24.5	29.0	---	24.0
10	---	---	7.0	7.0	8.0	11.0	12.0	---	---	---	---	---
11	18.5	12.0	8.5	6.5	9.5	12.5	13.0	17.5	---	---	27.0	24.0
12	---	---	9.0	6.0	9.0	11.5	13.5	20.0	25.0	28.0	---	---
13	---	12.5	8.5	6.5	9.0	---	13.0	20.0	---	---	---	19.0
14	18.0	---	9.5	7.0	8.5	9.0	10.5	20.0	25.5	28.5	---	---
15	---	13.0	10.0	7.0	7.0	9.5	11.0	19.0	---	---	---	23.5
16	18.0	---	9.0	8.0	---	8.0	10.0	20.0	26.0	27.0	---	---
17	---	---	9.0	7.0	7.5	10.0	10.0	---	---	---	24.5	24.5
18	18.0	12.5	8.0	5.0	8.0	11.0	13.0	21.0	25.0	28.0	---	---
19	---	---	7.0	6.5	9.0	10.0	14.0	19.5	---	---	21.0	24.0
20	---	12.0	7.5	7.5	7.5	10.0	14.0	17.0	23.5	---	---	---
21	16.5	---	8.5	7.5	7.0	8.5	15.0	---	---	29.0	24.0	---
22	---	11.0	5.0	8.0	9.5	8.0	13.0	20.0	21.5	---	---	19.5
23	15.0	---	4.0	8.0	8.5	---	14.5	21.0	---	23.0	23.5	---
24	---	10.0	5.0	8.0	9.0	---	13.0	23.0	21.0	---	---	18.5
25	---	---	5.0	8.0	11.0	---	12.0	23.5	---	---	25.5	---
26	15.0	---	6.0	7.5	11.5	---	---	23.0	---	---	---	22.5
27	---	9.0	7.0	6.0	11.0	---	12.0	23.5	---	---	23.0	---
28	13.5	8.5	7.0	5.0	11.0	---	14.0	24.0	26.0	---	---	---
29	---	---	4.0	5.5	---	---	15.5	26.0	---	---	18.0	20.5
30	13.5	9.0	---	5.0	---	---	16.5	26.0	---	24.0	---	---
31	---	---	---	5.0	---	---	---	---	---	---	---	---
MONTH	---	---	7.5	6.5	8.5	---	12.0	20.0	---	---	---	---

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 2.00 MM
DEC.											
28...	1125	7.0	481	55	71	96	97	100	--	--	--
JAN.											
06...	2035	8.5	648	45	79	93	96	98	100	--	--
FEB.											
01...	1615	6.5	467	24	30	97	100	--	--	--	--
02...	1005	6.5	1500	50	202	81	89	93	96	100	--
03...	1510	7.0	500	22	30	94	98	100	--	--	--
04...	0640	6.5	1880	108	548	84	91	96	100	--	--
12...	2220	9.0	3940	262	2790	63	74	84	92	97	100
MAR.											
21...	2045	8.5	2160	264	1540	74	83	91	97	99	100

11418500 DEER CREEK NEAR SMARTVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4.9	1	.01	33	6	.57	14	2	.08
2	4.6	1	.01	18	4	.19	14	2	.08
3	4.8	1	.01	14	4	.15	60	16	2.6
4	5.4	1	.01	13	4	.14	100	18	4.9
5	5.4	1	.01	13	3	.11	38	5	.51
6	5.1	1	.01	14	3	.11	27	3	.22
7	4.8	1	.01	15	5	.20	22	2	.12
8	4.9	1	.01	29	6	.47	19	1	.05
9	5.3	1	.01	19	6	.31	18	1	.05
10	6.0	1	.02	15	6	.24	17	1	.05
11	5.8	2	.03	14	5	.19	17	1	.05
12	4.8	2	.03	13	4	.14	17	1	.05
13	4.9	1	.01	12	3	.10	19	2	.10
14	4.8	1	.01	10	2	.05	17	1	.05
15	5.1	1	.01	13	3	.11	17	2	.09
16	5.6	1	.02	13	3	.11	18	2	.10
17	5.2	1	.01	14	3	.11	16	2	.09
18	5.0	2	.03	17	4	.18	15	2	.08
19	4.5	2	.02	15	3	.12	15	2	.08
20	4.6	1	.01	13	4	.14	15	3	.12
21	4.6	1	.01	39	13	1.6	15	2	.08
22	4.9	1	.01	24	8	.52	15	2	.08
23	4.8	1	.01	16	5	.22	15	3	.12
24	5.0	1	.01	24	4	.26	13	2	.07
25	4.8	1	.01	24	3	.19	14	2	.08
26	4.6	1	.01	16	2	.09	16	2	.09
27	4.8	1	.01	12	2	.06	47	13	3.7
28	24	12	1.1	13	2	.07	354	44	50
29	33	8	.80	13	2	.07	75	5	1.3
30	14	4	.15	13	2	.07	37	3	.30
31	26	8	.01	---	---	---	24	2	.13
MONTH	232.0	---	3.22	511	---	6.89	1120	---	65.42

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	21	2	.11	575	33	74	53	12	1.7
2	19	3	.15	1370	59	293	65	11	1.9
3	17	4	.18	596	24	39	53	10	1.4
4	19	5	.26	932	53	178	47	8	1.0
5	20	5	.27	243	14	9.2	51	10	1.4
6	364	42	61	159	9	3.9	74	9	1.8
7	343	42	53	132	9	3.2	270	23	25
8	689	66	175	310	18	23	652	37	71
9	131	6	2.1	1290	69	322	257	11	7.6
10	62	6	1.0	709	34	80	165	10	4.5
11	46	5	.62	213	18	10	120	8	2.6
12	37	4	.40	1180	81	677	92	8	2.0
13	31	4	.33	2010	79	551	104	9	2.5
14	28	4	.30	454	27	33	182	9	4.4
15	27	4	.29	230	21	13	246	11	7.3
16	29	4	.31	159	20	8.6	647	19	39
17	26	3	.21	124	18	6.0	318	9	7.7
18	23	3	.19	101	15	4.1	302	8	6.5
19	19	3	.15	171	27	16	411	14	18
20	19	3	.15	210	19	12	414	10	11
21	19	3	.15	115	13	4.0	691	67	363
22	18	4	.19	89	12	2.9	927	48	186
23	18	4	.19	78	11	2.3	423	12	14
24	18	4	.19	70	10	1.9	661	23	104
25	18	3	.15	65	11	1.9	2320	126	1100
26	18	3	.15	59	11	1.8	1010	17	46
27	23	5	.38	57	9	1.4	657	15	27
28	12	3	.10	51	9	1.2	498	15	20
29	16	3	.13	---	---	---	425	14	16
30	18	3	.15	---	---	---	370	14	14
31	27	3	.22	---	---	---	316	13	11
MONTH	2175	---	298.02	11752	---	2373.4	12821	---	2119.3

11418500 DEER CREEK NEAR SMARTVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	280	12	9.1	123	7	2.3	23	6	.37
2	250	10	6.8	112	5	1.5	23	6	.37
3	232	10	6.3	122	8	2.6	20	5	.27
4	309	10	8.3	157	8	3.4	17	7	.32
5	573	18	28	141	5	1.9	15	10	.41
6	519	11	15	121	5	1.6	13	8	.28
7	429	9	10	107	6	1.7	13	7	.25
8	362	8	7.8	97	6	1.6	12	7	.23
9	297	7	5.6	90	7	1.7	11	7	.21
10	245	8	5.3	82	7	1.6	8.3	6	.13
11	207	8	4.5	75	6	1.2	8.9	6	.14
12	189	7	3.6	69	7	1.3	9.1	6	.15
13	190	7	3.6	66	7	1.2	8.4	5	.11
14	175	7	3.3	64	7	1.2	7.7	4	.08
15	186	8	4.0	59	7	1.1	8.4	5	.11
16	177	7	3.3	84	10	2.3	9.1	5	.12
17	161	6	2.6	105	9	2.6	7.7	4	.08
18	139	5	1.9	106	6	1.7	6.0	3	.05
19	126	4	1.4	103	6	1.7	6.0	3	.05
20	118	4	1.3	115	7	2.2	6.6	6	.11
21	110	4	1.2	127	7	2.4	6.9	8	.15
22	98	5	1.3	102	6	1.7	6.6	7	.12
23	104	5	1.4	55	4	.59	5.7	4	.06
24	199	10	7.7	44	4	.48	5.5	2	.03
25	356	11	12	38	4	.41	7.7	2	.04
26	270	6	4.4	31	5	.42	7.1	2	.04
27	206	7	3.9	25	5	.34	5.5	2	.03
28	169	7	3.2	20	7	.38	5.0	2	.03
29	147	6	2.4	21	6	.34	4.7	2	.03
30	132	6	2.1	19	6	.31	4.0	3	.03
31	---	---	---	21	6	.34	---	---	---
MONTH	6955	---	171.3	2501	---	44.11	291.9	---	4.40

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.8	3	.03	3.4	2	.02	6.4	2	.03
2	4.1	2	.02	3.3	2	.02	6.2	2	.03
3	4.2	2	.02	3.6	1	.01	5.9	2	.03
4	4.6	2	.02	3.5	2	.02	5.7	2	.03
5	5.1	2	.03	3.2	2	.02	5.3	2	.03
6	4.9	3	.04	3.1	2	.02	5.2	2	.03
7	4.3	3	.03	3.1	2	.02	4.8	2	.03
8	3.8	3	.03	3.6	2	.02	5.0	1	.01
9	3.7	3	.03	4.1	2	.02	5.3	1	.01
10	3.5	2	.02	3.9	3	.03	5.0	2	.03
11	3.7	2	.02	3.2	5	.04	5.5	3	.04
12	3.9	1	.01	3.0	4	.03	5.5	2	.03
13	4.1	2	.02	2.9	3	.02	5.5	2	.03
14	3.9	2	.02	3.0	2	.02	5.7	2	.03
15	3.8	2	.02	2.9	1	.01	5.9	3	.05
16	5.5	3	.04	4.3	1	.01	5.7	2	.03
17	5.6	2	.03	4.4	1	.01	4.6	2	.02
18	5.0	2	.03	6.2	3	.05	4.8	2	.03
19	3.7	2	.02	8.3	5	.11	5.5	2	.03
20	3.7	3	.03	7.3	4	.08	5.5	2	.03
21	3.4	3	.03	7.1	2	.04	6.2	2	.03
22	3.3	2	.02	8.3	4	.09	19	50	4.8
23	3.2	2	.02	8.6	7	.16	34	32	2.9
24	2.9	2	.02	8.8	7	.17	19	15	1.3
25	3.0	2	.02	7.5	7	.14	4.1	2	.02
26	2.9	2	.02	6.6	6	.11	3.6	2	.02
27	3.1	2	.02	6.4	4	.07	3.6	2	.02
28	3.4	2	.02	6.2	5	.08	4.3	2	.02
29	3.2	3	.03	6.4	6	.10	4.6	2	.02
30	3.8	3	.03	6.4	4	.07	15	18	1.4
31	3.6	2	.02	6.4	2	.03	---	---	---
MONTH	120.7	---	.76	159.0	---	1.64	222.4	---	11.11
YEAR	38061.0		5099.57						

11420700 DRY CREEK NEAR BROWNS VALLEY, CALIF.

LOCATION.--Lat 39°15'23", long 121°20'34", in NE¼SW¼ sec.7, T.16 N., R.6 E., Yuba County, on left bank 500 ft (150 m) upstream from diversion dam, and 3.6 mi (5.8 km) east of Browns Valley.

DRAINAGE AREA.--87.1 mi² (225.6 km²).

PERIOD OF RECORD.--July 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 265 ft (80.8 m), from topographic map.

AVERAGE DISCHARGE (unadjusted).--11 years, 89.7 ft³/s (2.540 m³/s), 64,990 acre-ft/yr (80.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,290 ft³/s (93.2 m³/s) Mar. 25 (gage height, 8.54 ft or 2.603 m); minimum daily, 3.6 ft³/s (0.10 m³/s) Jan. 31.
Period of record: Maximum discharge, 5,950 ft³/s (169 m³/s) Jan. 21, 1969 (gage height, 10.38 ft or 3.164 m); minimum daily, 1.2 ft³/s (0.034 m³/s) Dec. 12-15, 1964.

REMARKS.--Records good except those for the summer months, which are fair. Flow regulated by Lake Mildred, capacity, 1,500 acre-ft (1.85 hm³) and Merle Collins Reservoir since 1963, capacity, 57,000 acre-ft (70.3 hm³), 6.5 mi (10.5 km) upstream. Some diversion above station for irrigation. See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	12	6.1	5.1	222	60	154	7.6	6.8	7.2	7.1	7.3
2	8.1	11	6.2	5.0	230	78	138	4.8	6.6	7.1	8.3	7.0
3	8.4	11	12	5.0	67	80	131	9.4	6.3	6.8	7.4	7.7
4	8.0	10	12	5.2	172	67	187	9.9	6.2	7.1	7.0	7.3
5	7.8	10	7.6	5.0	41	63	308	9.6	6.5	7.5	6.6	6.5
6	7.6	11	6.9	31	28	74	323	9.6	5.7	7.3	6.6	6.6
7	7.4	14	6.4	26	26	274	256	11	6.3	6.9	6.6	7.4
8	7.5	15	6.3	30	79	1330	285	12	6.6	6.8	6.3	7.7
9	7.9	12	6.0	13	141	716	237	12	6.4	7.1	6.4	7.9
10	8.9	11	5.9	9.4	78	397	184	9.7	6.0	7.2	6.4	9.5
11	8.8	11	5.9	7.6	37	274	157	9.3	7.4	6.2	6.5	8.7
12	8.4	10	6.3	7.0	392	182	136	9.1	7.9	7.0	7.3	7.7
13	9.2	10	6.0	6.6	465	167	100	10	7.0	7.5	8.2	7.8
14	7.7	10	5.6	6.4	633	179	91	10	5.8	7.5	8.1	7.9
15	7.8	10	5.4	6.2	448	158	99	9.8	5.7	8.4	8.5	8.2
16	7.7	9.9	5.4	6.1	293	385	95	8.8	5.6	11	8.0	9.0
17	8.0	9.9	5.4	5.9	199	291	91	8.2	6.0	11	7.8	8.6
18	7.8	13	5.4	5.6	153	330	82	8.5	6.5	9.8	9.1	8.9
19	7.1	12	5.4	5.5	205	700	77	9.1	6.8	9.7	9.8	7.9
20	6.9	10	5.4	5.6	385	811	69	9.1	6.9	9.5	10	7.9
21	6.8	14	4.9	5.5	239	633	61	8.5	7.2	9.6	9.2	8.2
22	6.0	11	4.8	5.4	154	1130	50	8.7	6.6	9.9	7.9	7.3
23	6.7	9.8	4.7	5.4	118	534	50	8.3	6.3	10	7.8	7.5
24	5.7	9.7	4.7	5.4	99	596	105	7.9	6.1	9.0	7.8	7.3
25	5.8	14	4.7	5.3	87	2470	337	7.6	6.3	7.4	7.3	8.2
26	5.6	12	4.7	5.2	77	919	176	7.0	6.0	7.0	7.8	7.4
27	6.2	8.9	7.0	5.1	69	497	113	6.7	4.8	7.5	8.2	6.8
28	14	7.0	26	5.0	63	346	89	6.0	4.9	6.4	8.0	7.5
29	14	7.2	9.2	5.2	---	271	70	5.8	5.5	6.7	7.7	7.7
30	13	5.6	6.9	3.8	---	221	35	5.2	6.5	6.7	7.3	8.0
31	18	---	6.0	3.6	---	193	---	5.6	---	7.0	8.0	---
TOTAL	261.8	322.8	215.2	252.1	5200	14426	4286	264.8	189.2	245.8	239.0	233.4
MEAN	8.45	10.7	6.94	8.13	186	465	143	8.54	6.31	7.93	7.71	7.78
MAX	18	15	26	31	633	2470	337	12	7.9	11	10	9.5
MIN	5.6	5.6	4.7	3.6	26	60	35	4.8	4.8	6.2	6.3	6.5
AC-FT	519	639	427	500	10310	28610	8500	525	375	488	474	463

CAL YR 1974 TOTAL 56689.1 MEAN 155 MAX 3210 MIN 4.4 AC-FT 112400
WTR YR 1975 TOTAL 26135.3 MEAN 71.6 MAX 2470 MIN 3.6 AC-FT 51840

11420800 YUBA RIVER AT DAQUERRA POINT DAM, NEAR BROWNS VALLEY, CALIF.

LOCATION.--Lat 39°12'30", long 121°26'31", in SW¼SW¼ sec.29, T.16 N., R.5 E., Yuba County, temperature recorder on left end of Daquerra Point Dam, 2.9 mi (4.7 km) southwest of Browns Valley.

DRAINAGE AREA.--1,330 mi² (3,445 km²).

PERIOD OF RECORD.--Water temperatures: October 1974 to September 1975.

EXTREMES.--Current year:
Water temperatures: Maximum, 21.5°C Oct. 1; minimum, 6.0°C on several days during December to February.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.5	17.5	14.0	12.0	7.5	6.5	7.0	6.0	7.0	6.0	8.5	7.5
2	21.0	18.0	14.0	11.5	7.0	7.0	7.5	6.0	7.0	6.5	10.0	8.0
3	21.0	18.0	14.0	11.5	7.5	7.0	7.0	6.0	7.5	6.5	10.0	7.5
4	21.0	18.0	14.0	11.5	7.5	6.5	7.0	6.5	8.0	7.0	10.0	7.5
5	20.5	17.0	14.0	11.0	7.5	6.5	7.0	6.5	7.5	7.0	8.5	8.0
6	20.5	16.5	13.5	11.0	7.5	6.5	7.0	7.0	7.5	7.0	9.0	8.0
7	20.5	17.0	12.0	11.5	8.0	6.5	7.5	7.0	8.0	7.0	9.0	8.0
8	21.0	18.0	13.0	11.0	7.0	6.5	7.5	6.5	9.5	8.0	9.5	8.5
9	21.0	18.0	13.0	10.5	7.5	6.5	7.5	6.5	9.0	7.0	9.5	8.0
10	21.0	17.5	13.0	10.5	7.0	6.5	7.5	7.0	8.0	7.0	9.5	7.5
11	20.5	17.5	13.0	10.5	7.0	6.5	8.0	6.5	9.5	7.5	10.5	8.0
12	20.5	17.5	13.0	10.5	7.0	6.5	8.0	7.0	9.0	8.0	10.5	8.0
13	20.5	17.0	13.0	10.5	7.5	6.5	8.0	6.5	8.5	8.0	8.5	8.0
14	20.0	16.5	13.0	11.0	7.5	6.5	8.0	6.5	8.5	7.5	10.0	7.5
15	20.0	16.5	12.5	10.5	8.0	6.5	8.0	6.5	9.0	7.0	8.5	8.0
16	19.5	16.0	11.5	10.5	7.5	6.5	8.0	6.5	9.0	7.0	9.5	7.5
17	18.5	15.5	11.5	10.5	8.0	6.5	7.5	7.0	9.0	6.5	8.5	8.0
18	18.5	15.0	11.5	9.5	7.5	6.5	8.0	7.0	9.0	7.0	9.5	8.0
19	17.0	15.0	11.0	9.0	7.0	6.5	7.5	7.0	8.0	8.0	9.0	8.0
20	17.5	14.5	10.5	9.0	7.0	6.5	8.0	6.5	9.0	7.5	10.0	8.0
21	17.0	14.0	10.0	8.5	7.0	6.5	8.0	6.5	8.5	6.5	8.0	7.5
22	16.5	13.0	9.5	8.0	7.5	6.0	8.0	6.5	9.0	6.5	9.5	7.5
23	16.5	13.5	9.5	8.0	7.0	6.0	8.0	6.5	9.0	6.5	9.0	7.5
24	16.0	13.0	9.0	7.5	7.0	6.0	9.0	7.0	8.5	7.0	8.5	8.0
25	15.5	13.5	9.0	7.5	7.0	6.0	9.0	7.0	9.0	7.0	9.5	8.0
26	16.0	13.5	8.5	7.0	7.0	6.0	8.5	6.5	9.0	7.0	9.5	7.5
27	15.0	13.5	8.5	7.0	6.5	6.5	8.0	6.5	9.5	7.5	9.5	7.5
28	15.0	13.0	8.0	7.0	7.0	6.0	8.0	6.0	10.0	7.5	9.5	7.5
29	15.0	12.5	8.0	6.5	7.0	6.0	8.5	6.5	---	---	10.0	7.5
30	15.0	12.5	8.0	6.5	7.5	6.0	8.5	6.0	---	---	10.0	8.0
31	13.5	12.5	---	---	7.0	6.0	6.5	6.0	---	---	10.0	8.0
MONTH	21.5	12.5	14.0	6.5	8.0	6.0	9.0	6.0	10.0	6.0	10.5	7.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	8.0	13.0	9.5	16.5	14.0	17.5	13.0	19.5	16.0	17.5	14.5
2	9.5	8.0	13.0	9.5	16.5	14.0	17.5	13.0	19.5	16.5	17.5	14.5
3	8.5	7.5	12.0	10.0	17.0	14.0	17.5	13.5	21.0	16.5	17.5	14.5
4	8.5	7.5	13.0	9.0	17.0	13.5	17.5	13.5	19.0	16.0	17.5	14.5
5	8.5	7.5	13.0	9.0	16.5	13.5	18.0	13.5	20.0	16.5	17.5	15.0
6	9.0	7.5	14.0	9.5	16.0	13.0	18.0	13.5	20.0	16.5	18.0	15.0
7	8.0	7.5	14.5	9.5	16.0	13.0	18.0	14.0	20.0	16.5	17.5	15.0
8	9.0	7.5	15.0	10.0	15.5	13.0	18.5	14.0	20.0	16.5	17.5	15.0
9	9.5	7.0	14.5	10.0	16.5	13.5	18.0	14.0	20.5	17.0	18.0	15.0
10	9.5	7.5	14.0	10.0	16.0	13.5	17.5	14.0	20.5	17.0	16.0	15.0
11	10.0	7.5	15.5	10.5	15.5	13.5	18.5	14.0	20.5	17.0	17.5	15.0
12	10.0	8.0	15.0	10.0	15.5	13.0	18.5	14.0	20.5	17.5	18.0	15.0
13	10.5	8.0	15.5	11.0	16.0	13.5	18.5	14.0	20.5	17.5	18.0	15.0
14	9.0	7.5	15.5	11.5	16.0	14.0	18.5	14.5	20.5	17.5	18.0	15.0
15	10.0	7.5	15.5	12.0	16.0	13.5	17.0	14.5	20.5	17.5	18.0	15.5
16	10.0	8.0	16.0	12.0	15.5	13.5	19.0	15.0	20.5	17.5	18.0	15.0
17	10.0	8.0	16.5	12.5	15.5	13.5	19.0	15.0	20.0	17.5	18.0	15.5
18	10.5	8.0	17.0	13.0	16.0	13.5	19.0	15.0	19.0	18.0	17.5	15.5
19	10.5	8.0	16.0	13.0	15.5	13.0	19.0	15.0	20.5	18.0	18.0	15.5
20	11.0	8.5	16.0	13.0	16.0	13.0	19.0	15.0	20.5	17.5	18.0	15.5
21	11.0	8.5	15.5	12.0	16.5	13.0	19.5	15.0	20.0	18.0	18.5	15.5
22	10.5	8.5	15.5	12.5	16.5	13.0	18.5	15.0	20.5	18.0	18.5	15.5
23	10.5	8.5	15.5	12.5	16.5	13.0	18.5	15.5	20.5	18.0	17.5	14.5
24	9.5	8.5	17.5	12.5	16.0	13.0	19.0	15.5	20.5	17.5	16.0	13.5
25	11.0	8.5	17.0	12.0	16.5	12.5	19.0	15.5	20.0	17.0	15.5	12.5
26	12.0	9.0	17.0	12.5	16.5	13.0	19.0	15.5	19.0	16.0	15.0	12.0
27	13.0	9.0	16.5	12.5	17.0	13.0	20.5	15.5	18.5	16.0	14.5	11.5
28	12.5	9.0	16.5	12.5	17.5	13.0	19.0	16.0	18.5	15.5	14.0	11.0
29	12.5	9.5	16.5	13.0	17.5	13.0	19.0	16.0	18.5	15.0	13.5	11.0
30	13.0	9.5	16.5	13.5	17.0	13.0	19.0	16.0	18.0	15.0	13.0	10.5
31	---	---	17.0	14.0	---	---	19.5	16.0	18.0	15.0	---	---
MONTH	13.0	7.0	17.5	9.0	17.5	12.5	20.5	13.0	21.0	15.0	18.5	10.5

11421000 YUBA RIVER NEAR MARYSVILLE, CALIF.

LOCATION.--Lat 39°10'33", long 121°31'26", in New Helvetia Grant, Yuba County, on left bank 4.2 mi (6.8 km) northeast of Marysville, and 5 mi (8 km) downstream from Dry Creek.

DRAINAGE AREA.--1,339 mi² (3,468 km²).

PERIOD OF RECORD.--Water years 1940-43, 1945 (low-water periods only), October 1940 to current year. Published as "at Marysville" October 1940 to September 1957. Records published for two sites August 1954 to September 1955. Yearly discharge for the 1945 water year published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 2.95 ft (0.899 m) below mean sea level. Prior to August 1954 and Oct. 1, 1956, to Sept. 30, 1957, at Simpson Lane Bridge in Marysville 4.2 mi (6.8 km) downstream at same datum. Sept. 3, 1963, to Sept. 23, 1968, auxiliary water-stage recorder at Simpson Lane Bridge in Marysville 4.2 mi (6.8 km) downstream at same datum.

AVERAGE DISCHARGE.--32 years (1943-75), 2,607 ft³/s (73.83 m³/s), 1,889,000 acre-ft/yr (2.33 km³/yr).

EXTREMES.--Current year: Maximum discharge, 10,900 ft³/s (309 m³/s) Mar.25 (gage height, 67.12 ft or 20.458 m); minimum daily, 200 ft³/s (5.66 m³/s) Oct. 7.
Period of record: Maximum discharge (1943 to current year), 180,000 ft³/s (5,100 m³/s) Dec. 22, 1964 (gage height, 90.15 ft or 27.478 m, from floodmarks), from rating curve extended above 91,000 ft³/s (2,580 m³/s) on basis of Corps of Engineers flood routing study; minimum recorded, 10 ft³/s (0.28 m³/s) July 2, 1959.

REMARKS.--Records good. Flow regulated by several reservoirs above station. Many diversions above station for power. Diversions for irrigation of about 13,000 acres (52.6 km²) between stations at Englebright Dam and near Marysville. See schematic diagram of Yuba River basin.

REVISIONS (WATER YEARS).--WSP 1715: 1956(M). WSP 1931: Drainage area. WRD Calif. 1965: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	432	3980	3350	2360	1780	3150	2050	2990	1420	2450	2530
2	219	412	3980	3280	4620	1790	4330	1570	3490	1550	2430	2570
3	224	412	4050	3280	3300	2020	4510	1090	3480	1610	1850	2560
4	224	408	4130	3290	3430	2480	4680	917	3550	1460	2320	2590
5	224	408	4020	3280	2300	2490	5040	1270	3610	1460	2350	2620
6	224	412	3970	3520	2100	2510	5110	993	3640	1470	2370	2630
7	200	448	3830	4220	1680	2690	4910	905	3670	1460	2360	2640
8	236	505	3240	4660	1830	3830	4870	881	3810	1440	2360	2640
9	375	473	3860	4180	4000	3020	4540	884	4590	1440	2360	2640
10	356	452	3680	4080	4140	2810	4660	935	4660	1460	2380	2640
11	351	447	3360	4020	2120	2840	4500	830	4660	1470	2370	2650
12	361	443	3290	3630	2890	2720	4340	1170	4390	1470	2370	2660
13	356	441	3300	3370	8430	2770	4030	1520	4630	1490	2360	2630
14	337	439	3340	2720	5310	2860	4310	1510	5090	1470	2370	2650
15	332	437	3310	1890	3520	2870	4450	1510	5130	1460	2370	2660
16	337	441	3350	1850	2150	3470	4430	1540	5280	1450	2390	2680
17	337	457	3330	1870	1710	3290	4400	1580	4780	1460	2380	2690
18	315	837	3330	1990	1610	3640	4360	1590	4600	1460	2380	2700
19	315	1110	3260	1980	1660	3980	4330	1760	3760	1470	2380	2710
20	319	1430	3390	1960	2250	4460	4280	2350	3360	1490	2390	2710
21	315	1770	3400	1970	2720	4070	4160	2370	2370	1590	2400	2710
22	328	2070	3320	1990	2620	5730	4030	2370	2110	2300	2400	2700
23	351	2340	3220	1990	2570	4210	3970	2290	1800	2310	2390	2730
24	370	2740	3220	1990	2540	4380	3740	985	1560	2320	2420	2740
25	342	3170	3220	2000	2510	9490	3610	844	2180	2320	2440	2720
26	328	3560	3230	1990	2480	8280	1950	810	2510	2300	2410	2720
27	342	4010	3280	1980	2470	5620	1720	1340	1960	1760	2440	2720
28	361	4020	3880	1780	2300	5200	1840	2310	1180	2270	2450	2700
29	379	4020	3640	1490	---	5020	2210	2360	1230	2310	2450	2700
30	379	4010	3520	1350	---	4890	2110	2820	1440	2330	2480	2680
31	422	---	3480	1360	---	4770	---	3510	---	2340	2510	---
TOTAL	9777	42554	109410	82310	81620	119980	118570	48864	101310	53610	73780	79920
MEAN	315	1418	3529	2655	2915	3870	3952	1576	3377	1729	2380	2664
MAX	422	4020	4130	4660	8430	9490	5110	3510	5280	2340	2510	2740
MIN	200	408	3220	1350	1610	1780	1720	810	1180	1420	1850	2530
AC-FT	19390	84410	217000	163300	161900	238000	235200	96920	200900	106300	146300	158500

CAL YR 1974 TOTAL 1450969 MEAN 3975 MAX 38300 MIN 200 AC-FT 2878000
WTR YR 1975 TOTAL 921705 MEAN 2525 MAX 9490 MIN 200 AC-FT 1828000

11421000 YUBA RIVER NEAR MARYSVILLE, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: November 1972 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 22.5°C Aug. 3; minimum, 6.0°C on several days during December and January.
Period of record:
Water temperatures: Maximum, 26.0°C July 29, 1973; minimum, 5.5°C Jan. 4-8, 1973.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	15.5	13.5	8.5	7.0	7.5	6.0	7.5	6.5	9.0	8.5
2	---	---	15.0	12.0	7.5	7.5	7.5	6.0	7.5	7.0	11.0	8.5
3	21.5	18.5	15.0	12.5	8.0	7.5	7.5	6.0	8.0	7.0	11.0	8.0
4	21.5	18.5	15.0	12.5	8.5	7.0	7.5	6.5	8.5	7.0	10.5	8.0
5	20.5	17.5	15.0	12.5	8.0	7.0	7.0	6.5	8.0	7.0	9.0	8.5
6	20.5	17.0	15.0	12.5	8.5	7.0	7.5	7.0	8.0	7.5	9.5	8.5
7	20.5	17.5	13.5	12.5	8.5	7.0	7.5	7.5	8.5	7.5	9.5	8.5
8	21.5	18.5	14.0	12.0	7.5	7.0	8.0	7.0	10.0	8.0	10.0	9.0
9	21.0	18.0	14.0	11.5	8.0	7.0	7.5	6.5	9.5	7.5	10.0	8.5
10	21.0	17.5	14.5	12.0	7.0	7.0	8.0	7.0	8.5	7.5	10.0	8.0
11	20.5	17.5	14.0	11.5	7.5	7.0	8.5	6.5	10.5	7.5	11.5	8.5
12	20.5	17.0	14.0	11.5	7.5	7.0	8.5	7.0	9.5	8.0	11.0	8.0
13	20.5	17.0	14.0	12.0	8.0	7.0	8.5	7.0	9.0	8.5	9.0	8.0
14	20.5	17.0	14.0	12.0	8.0	7.0	8.5	6.5	9.0	7.5	11.0	8.0
15	20.5	17.0	13.5	12.0	8.5	7.0	8.5	6.5	9.5	7.5	9.5	8.5
16	20.0	16.5	12.5	12.0	8.0	7.0	8.5	7.0	9.5	7.5	10.5	8.0
17	19.5	17.0	12.5	12.0	8.5	7.0	8.0	7.0	9.5	7.0	9.0	8.0
18	19.5	16.5	13.0	10.5	8.0	6.5	8.0	7.0	9.5	7.0	10.0	8.5
19	18.5	16.5	11.5	9.5	7.5	6.5	8.0	7.0	8.5	8.0	9.5	8.5
20	19.0	16.0	11.5	9.5	7.5	7.0	8.0	7.0	10.0	7.5	10.5	8.0
21	18.0	15.0	11.0	9.0	7.5	7.0	8.5	7.0	9.0	6.5	8.5	8.0
22	17.0	14.5	10.5	8.5	8.0	6.5	8.5	7.0	9.5	7.0	10.0	7.5
23	17.5	14.5	10.0	8.0	7.5	6.0	8.5	7.0	9.5	7.0	9.5	8.0
24	17.0	14.5	10.0	8.0	7.5	6.0	9.0	7.0	9.5	7.0	9.0	8.0
25	17.0	14.5	9.5	8.0	7.5	6.0	9.0	7.0	10.0	7.5	10.0	8.0
26	17.5	15.0	9.5	7.5	7.5	6.0	9.0	7.0	10.0	7.5	9.5	7.5
27	16.0	15.0	9.0	7.5	7.0	6.5	8.5	6.0	10.5	8.0	10.0	7.5
28	16.5	15.0	8.5	7.0	7.5	6.0	8.0	6.0	11.0	8.0	10.0	7.5
29	16.5	13.5	8.5	7.0	7.5	6.0	8.5	6.5	---	---	10.5	7.5
30	16.5	13.5	8.5	7.0	7.5	6.0	8.5	6.0	---	---	11.0	8.0
31	15.0	14.0	---	---	7.5	6.0	6.5	6.0	---	---	10.5	8.0
MONTH	21.5	13.5	15.5	7.0	8.5	6.0	9.0	6.0	11.0	6.5	11.5	7.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	8.0	14.0	9.5	18.0	14.5	18.5	13.0	21.0	16.5	18.5	15.0
2	10.5	8.0	14.0	10.0	17.5	14.0	18.5	13.5	21.0	16.5	19.0	15.0
3	9.0	8.0	12.0	10.0	18.5	14.5	19.0	14.0	22.5	16.5	19.0	15.0
4	9.0	7.5	14.0	9.0	18.5	14.0	18.5	14.0	21.5	17.0	19.0	15.0
5	9.0	7.5	14.0	9.5	18.0	14.0	19.5	14.0	21.5	16.5	19.0	15.0
6	9.5	7.5	15.0	9.5	17.5	13.5	19.5	14.0	21.0	17.0	19.0	15.0
7	8.5	7.5	16.0	10.0	17.0	13.5	20.0	14.5	21.0	16.5	19.0	14.5
8	9.5	7.5	16.0	10.5	17.0	13.5	20.0	14.5	21.5	17.0	18.5	15.0
9	10.5	7.0	16.0	10.5	17.5	13.5	20.0	14.5	21.5	17.0	19.0	15.5
10	10.5	7.0	15.0	10.5	17.0	14.0	19.0	14.5	21.5	17.0	16.5	15.0
11	10.5	7.5	17.0	11.0	17.0	13.5	20.0	14.5	21.5	17.5	19.0	15.5
12	11.0	8.0	16.0	10.5	17.0	13.5	20.0	15.0	21.5	17.5	19.0	15.5
13	11.0	8.0	17.0	11.0	17.5	13.5	20.5	14.5	21.5	17.0	19.0	15.5
14	9.0	7.5	16.5	11.5	17.5	14.0	20.5	15.0	21.5	17.5	19.0	15.5
15	10.5	7.5	16.0	11.5	17.0	14.0	17.5	15.0	21.5	17.5	19.0	15.5
16	10.5	8.0	17.5	12.0	16.5	13.5	20.5	15.5	21.5	17.5	19.0	15.5
17	11.0	7.5	18.0	12.5	17.0	13.5	20.5	15.5	20.5	17.5	19.0	16.0
18	11.0	7.5	18.5	13.0	17.0	13.5	20.5	15.0	19.5	18.0	19.0	16.0
19	11.0	8.0	17.5	13.0	16.5	13.5	20.5	15.0	21.0	18.0	19.0	15.5
20	11.5	8.0	16.0	12.0	17.0	13.0	20.5	15.5	21.5	17.5	19.0	16.0
21	12.0	8.5	16.5	12.0	18.0	13.5	21.0	15.5	21.0	18.0	19.5	16.0
22	11.0	8.0	16.5	12.5	18.0	13.5	20.0	15.5	21.5	18.0	19.5	16.0
23	10.5	8.0	17.0	12.5	18.0	13.0	20.0	15.5	21.5	17.5	18.5	15.0
24	10.0	8.5	19.0	13.0	17.0	13.5	20.5	16.0	21.5	17.5	17.5	14.0
25	11.5	8.0	18.5	13.0	17.5	13.0	20.5	16.0	21.0	17.5	17.0	13.5
26	13.0	8.5	19.0	13.5	17.5	13.0	20.5	16.0	20.0	16.5	16.5	13.0
27	13.5	9.0	18.0	13.5	18.0	13.0	22.0	16.0	19.5	16.0	15.5	12.5
28	13.0	9.0	17.5	13.0	19.5	13.5	20.5	16.0	19.5	16.0	15.5	12.0
29	13.5	9.0	18.0	13.0	19.5	14.0	20.5	16.0	19.5	15.5	15.0	12.0
30	13.5	9.0	18.0	13.5	18.5	13.0	20.5	16.0	19.0	15.0	15.0	12.0
31	---	---	18.5	14.5	---	---	20.5	16.0	19.0	15.0	---	---
MONTH	13.5	7.0	19.0	9.0	19.5	13.0	22.0	13.0	22.5	15.0	19.5	12.0

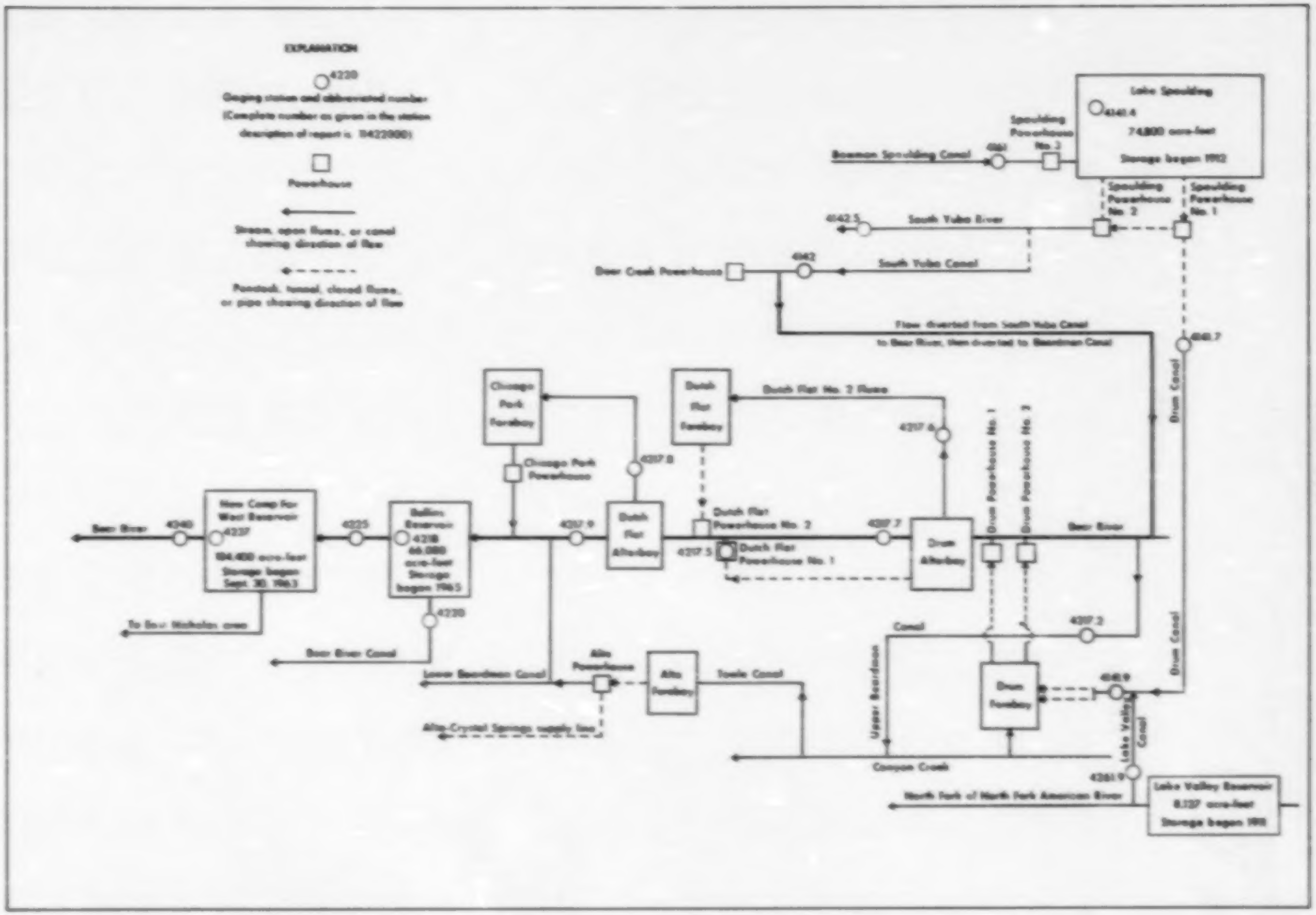

EXPLANATION
4220
Gaging station and abbreviated number (Complete number as given in the station description of report is 11422000)
Powerhouse
Stream, open flume, or canal showing direction of flow
Penstock, tunnel, closed flume, or pipe showing direction of flow
Lake Spaulding
4141.4
74,800 acre-feet
Storage began 1912
Spaulding Powerhouse No. 3
Bowman Spaulding Canal
4141
Spaulding Powerhouse No. 2
Spaulding Powerhouse No. 1
4142.5
South Yuba River
4142
South Yuba Canal
Bear Creek Powerhouse
Flow diverted from South Yuba Canal to Bear River, then diverted to Boardman Canal
4141.7
Drum Canal
Dutch Flat Forebay
Dutch Flat No. 2 Flume
4217.6
Chicago Park Forebay
Chicago Park Powerhouse
4217.8
Dutch Flat Afterbay
Dutch Flat Powerhouse No. 2
4217.5
Dutch Flat Powerhouse No. 1
4217.7
Drum Afterbay
Drum Powerhouse No. 1
Drum Powerhouse No. 2
Bear River
4217.9
Rollins Reservoir
4218
66,000 acre-feet
Storage began 1965
4225
New Camp Far West Reservoir
4237
104,400 acre-feet
Storage began Sept. 30, 1963
4240
Bear River
To Beale Nicholas area
4220
Bear River Canal
Lower Boardman Canal
Alta Powerhouse
Alta Forebay
Towle Canal
Alta-Crystal Springs supply line
Canal
4217.2
Upper Boardman
Drum Forebay
4141.9
Drum Canal
Lake Valley Canal
4261.9
Canyon Creek
North Fork of North Fork American River
Lake Valley Reservoir
8,127 acre-feet
Storage began 1911

FIGURE 9.—Schematic diagram showing diversion and storage in Bear River basin

11421700 FEATHER RIVER BELOW SHANGHAI BEND, NEAR OLIVEHURST, CALIF.

LOCATION.--Lat 39°04'44", long 121°36'08", in New Helvetia Grant, Sutter County, on right bank 1.5 mi (2.4 km) downstream from Shanghai Bend, 3.0 mi (4.8 km) southeast of Olivehurst, and 3.4 mi (5.5 km) south of Yuba City.

DRAINAGE AREA.--5,334 mi² (13,815 km²).

PERIOD OF RECORD.--June 1944 to September 1969 in reports of California Department of Water Resources, October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3.01 ft (0.917 m) below mean sea level (levels by California Department of Water Resources).

AVERAGE DISCHARGE.--6 years, 9,298 ft³/s (263.3 m³/s), 6,736,000 acre-ft/yr (8.31 km³/yr).

EXTREMES.--Current year: Maximum discharge, 22,700 ft³/s (643 m³/s) Feb. 13 (gage height, 44.03 ft or 13.420 m); minimum daily, 3,560 ft³/s (101 m³/s) Mar. 1, 2.
Period of record: Maximum discharge, 133,000 ft³/s (3,770 m³/s) Jan. 22, 1970 (gage height, 62.55 ft or 19.065 m); minimum daily, 1,640 ft³/s (46.4 m³/s) Apr. 21, 1972.

REMARKS.--Flow regulated by many reservoirs and powerplants. See schematic diagrams of South Fork Feather River, North Fork Feather River, and Yuba River basins and Feather River at Lake Oroville.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8460	4160	14600	7450	6060	3560	5560	10400	6980	4100	8430	6880
2	8460	4070	14600	7260	12900	3560	5890	10300	7410	4130	7960	6950
3	8480	3950	14400	7290	12200	3700	6360	10900	7400	4310	7430	6940
4	8500	3980	15000	7250	9170	4190	6280	11400	7500	4130	7770	6950
5	8420	3900	14900	7210	7140	4220	6680	11700	8980	4130	7830	6970
6	8350	4010	14800	7460	5600	4400	6790	11500	11300	4160	7850	6970
7	8390	4070	14600	8460	4280	4820	6560	11300	12500	4160	7770	6980
8	8520	4220	14000	8870	4960	7070	6510	11300	13200	4070	7620	6980
9	8630	4130	14400	8470	7680	6860	6200	11300	14000	4100	7620	7110
10	8650	4070	13200	8150	8400	5700	6380	11600	14200	4870	7350	7100
11	8590	4040	10900	8010	5670	5450	6150	11400	13800	4590	6870	7130
12	8590	4070	9240	7640	4460	5210	6090	11700	12500	5700	6840	7140
13	8650	4070	9050	7320	18700	5100	5790	12500	11600	7020	6850	7140
14	8680	6090	8160	6940	16500	5560	5580	12500	10800	7620	6860	7120
15	8540	8370	7490	6030	9720	5410	5930	12400	10100	7660	6820	7100
16	8540	8540	7420	5910	6900	5810	5920	12500	9740	7670	6830	7070
17	8450	8560	7420	5600	5420	5750	5870	12100	8940	7580	6860	7060
18	8410	8860	7420	5620	4000	5970	5890	11100	7540	7490	6900	7020
19	8380	9210	7340	5450	4070	6270	5810	10600	6830	7470	6930	7040
20	8310	9470	7360	5420	4470	7500	5750	11100	6410	7560	6940	6820
21	8300	10200	7380	5580	4790	6840	5790	9540	5330	7630	6930	6050
22	8440	12300	7300	5610	4630	10400	6080	9080	4990	8410	6940	5590
23	8440	12000	7170	5580	4500	9290	6880	8180	4760	8550	6930	5560
24	7100	13200	7240	5460	4400	8610	6790	5900	4340	8560	6920	5560
25	5090	13700	7210	5380	4340	13700	7820	4920	4820	8630	6910	5550
26	4400	14000	7180	5190	4310	14100	7210	4850	5260	8590	6840	5530
27	4160	14500	7360	5060	4340	10000	7870	5020	4850	8100	6790	5530
28	4310	14600	7990	4850	4190	8880	9160	6220	3980	8230	6770	5560
29	4250	14700	7960	4630	---	8320	10400	6300	3890	8270	6760	5580
30	4190	14600	7680	4340	---	7860	10400	6590	4130	8340	6750	5550
31	4280	---	7540	4660	---	7280	---	7430	---	8380	6850	---
TOTAL	232580	246520	308710	197960	193800	211470	199830	303630	248080	203410	221690	196530
MEAN	7503	8217	9958	6385	6921	6822	6661	9795	8269	6562	7151	6551
MAX	8650	14700	15000	8870	18700	14100	10400	12500	14200	8630	8430	7140
MIN	4160	3950	7170	4340	4000	3560	5560	4850	3890	4070	6750	5530
AC-FT	461300	489000	612300	392600	384400	419500	396400	602200	492100	403500	439700	389800

CAL YR 1974 TOTAL 5182450 MEAN 14200 MAX 88000 MIN 3950 AC-FT 10280000
WTR YR 1975 TOTAL 2764190 MEAN 7573 MAX 18700 MIN 3560 AC-FT 5483000

11421720 BOARDMAN CANAL NEAR EMIGRANT GAP, CALIF.

LOCATION.--Lat 39°17'49", long 120°42'08", in SE¼NE¼ sec.35, T.17 N., R.11 E., Placer County, on right bank 0.4 mi (0.6 km) downstream from Boardman diversion dam, and 1.8 mi (2.9 km) west of Emigrant Gap.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 5,020 ft (1,530 m), from topographic map. Prior to June 14, 1967, water-stage recorder 0.2 mi (0.3 km) downstream at different datum.

AVERAGE DISCHARGE.--11 years, 23.2 ft³/s (0.657 m³/s), 16,810 acre-ft/yr (20.7 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 43 ft³/s (1.22 m³/s) Dec. 21, 1964; no flow for several days in most years.

REMARKS.--Water is diverted from Bear River to be used for power development and irrigation in the Bear River basin. See schematic diagram of Bear River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	31	23	26	25	21	12	3.8	21	27	33	31
2	30	35	24	26	23	21	6.9	3.8	21	27	33	31
3	30	35	22	26	23	20	6.8	3.8	21	27	34	31
4	30	35	19	26	24	16	14	3.7	21	27	33	31
5	30	35	23	26	23	13	18	3.6	21	27	32	31
6	30	35	23	25	20	13	17	3.6	21	27	32	30
7	7.8	31	23	22	21	13	18	3.6	22	27	33	31
8	.49	25	24	14	20	17	18	3.6	25	29	33	33
9	.49	28	25	21	14	15	18	3.6	25	29	33	32
10	.44	28	26	22	20	12	18	3.5	25	30	33	32
11	.42	28	24	21	19	12	18	3.2	25	31	33	32
12	.42	28	22	23	20	12	18	3.1	25	31	34	32
13	.42	28	22	25	23	14	18	2.9	25	31	33	32
14	.36	27	23	25	21	16	18	2.8	25	30	33	32
15	.36	26	22	23	21	13	18	2.3	25	30	33	32
16	.36	24	23	19	20	23	18	1.9	25	31	34	32
17	.48	25	22	19	20	23	18	4.4	25	32	33	32
18	16	27	22	19	20	23	18	8.6	25	32	34	32
19	37	26	22	21	21	19	18	3.6	25	32	33	31
20	32	25	22	22	21	12	18	8.0	25	32	30	31
21	30	24	21	22	20	16	15	12	27	32	29	32
22	30	21	22	23	20	24	9.8	12	28	32	30	33
23	27	25	22	22	20	23	10	12	28	31	30	33
24	33	25	22	22	20	24	7.9	11	27	30	30	32
25	37	25	22	22	21	14	6.8	11	27	30	30	32
26	35	25	21	22	21	6.1	9.5	11	27	31	30	32
27	35	25	22	22	21	6.0	6.0	16	27	32	31	32
28	30	24	20	21	21	5.4	3.8	20	27	31	31	32
29	30	23	20	22	---	7.7	3.8	20	27	31	31	14
30	36	23	22	22	---	15	3.8	21	27	31	31	.64
31	32	---	26	23	---	15	---	21	---	33	31	---
TOTAL	628.06	822	696	694	583	484.2	403.1	244.4	745	933	993	903.64
MEAN	20.3	27.4	22.5	22.4	20.8	15.6	13.4	7.88	24.8	30.1	32.0	30.1
MAX	37	35	26	26	25	24	18	21	28	33	34	33
MIN	.36	21	19	14	14	5.4	3.8	1.9	21	27	29	.64
AC-FT	1250	1630	1380	1380	1160	960	800	485	1480	1850	1970	1790

CAL YR 1974 TOTAL 9167.34 MEAN 25.1 MAX 37 MIN .36 AC-FT 18180
WTR YR 1975 TOTAL 8129.38 MEAN 22.3 MAX 37 MIN .36 AC-FT 16120

11421750 DUTCH FLAT NO. 1 POWERPLANT NEAR DUTCH FLAT, CALIF.

LOCATION.--Lat 39°13'02", long 120°50'04", in SW¼SE¼ sec.27, T.16 N., R.10 E., Placer County, at powerplant 0.8 mi (1.3 km) north of Dutch Flat.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Recorded powerplant output.

AVERAGE DISCHARGE.--11 years, 248 ft³/s (7.023 m³/s), 179,700 acre-ft/yr (222 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 548 ft³/s (15.5 m³/s) for several days in January, February, April 1965; no flow at times in each year.

REMARKS.--Water is diverted from Drum Afterbay through a tunnel to Dutch Flat No. 1 powerplant and returned to Dutch Flat Afterbay. See schematic diagram showing diversion and storage in Bear River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	261	189	0	63	79	0	95	448	501	438	339	368
2	359	189	40	63	0	0	261	428	487	408	408	368
3	295	197	79	63	40	0	158	528	461	408	388	349
4	270	181	79	63	71	0	142	528	448	408	418	359
5	286	173	63	79	55	0	158	528	461	408	312	303
6	286	181	0	17	0	0	87	474	448	542	436	0
7	295	142	0	95	0	0	79	487	448	295	398	0
8	295	0	0	119	0	71	119	487	515	359	261	0
9	173	0	0	119	0	368	87	515	501	378	398	0
10	134	0	0	166	0	295	158	487	408	408	398	0
11	189	71	.38	126	0	487	134	501	474	312	408	0
12	189	87	40	126	0	438	212	528	474	378	378	0
13	173	71	40	111	0	330	197	501	418	349	368	0
14	205	79	40	40	181	212	166	515	408	339	398	0
15	158	0	55	103	142	197	173	495	408	359	368	0
16	166	0	87	0	17	0	158	495	438	378	388	0
17	158	0	55	0	17	0	166	528	408	378	398	0
18	197	63	79	0	111	0	134	388	448	368	428	0
19	173	40	71	0	119	134	134	461	438	428	408	0
20	181	0	55	0	55	173	166	461	408	438	368	0
21	189	63	87	0	0	286	166	501	418	253	418	40
22	205	0	87	0	0	134	212	501	398	398	418	63
23	197	0	87	0	0	17	181	501	515	418	349	0
24	181	0	55	0	0	134	368	461	418	359	408	0
25	189	63	63	0	17	79	487	448	418	398	349	0
26	181	71	63	0	103	236	438	448	448	278	349	197
27	175	0	87	0	71	270	461	438	428	388	368	398
28	197	0	0	0	71	286	461	428	428	388	378	428
29	189	0	0	0	---	253	428	438	418	388	349	388
30	189	0	71	0	---	236	438	461	408	398	339	398
31	134	---	55	0	---	303	---	448	---	474	378	---
TOTAL	6469	1860	1438.38	1353	1149	4939	6624	14856	13297	11919	11769	3659
MEAN	209	62.0	46.4	43.6	41.0	159	221	479	443	384	380	122
MAX	359	197	87	166	181	487	487	528	515	542	436	428
MIN	134	0	0	0	0	0	79	388	398	253	261	0
AC-FT	12830	3690	2850	2680	2280	9800	13140	29470	26370	23640	23340	7260

CAL YR 1974 TOTAL 100288.38 MEAN 275 MAX 528 MIN 0 AC-FT 198900
WTR YR 1975 TOTAL 79332.38 MEAN 217 MAX 542 MIN 0 AC-FT 157400

11421760 DUTCH FLAT NO. 2 FLUME NEAR BLUE CANYON, CALIF.

LOCATION.--Lat 39°15'16", long 120°46'28", in SE¼NE¼ sec.18, T.16 N., R.11 E., Placer County, on left bank 600 ft (183 m) downstream from Drum Afterbay, and 3.6 mi (5.8 km) west of Blue Canyon.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,348.09 ft (1,020.498 m) above mean sea level (levels by Nevada Irrigation District).

AVERAGE DISCHARGE.--9 years, 406 ft^3/s (11.50 m^3/s), 294,100 acre-ft/yr (363 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 610 ft^3/s (17.3 m^3/s) Mar. 1, 1968; no flow at times in each year.

REMARKS.--Records good except flows below 40 ft^3/s (1.13 m^3/s), which are estimated. Water is diverted from Drum Afterbay through the flume to Dutch Flat No. 2 powerplant and then to Dutch Flat Afterbay. See schematic diagram of Bear River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	508	591	140	280	327	328	430	414	436	425	375	442
2	489	593	374	314	304	446	576	432	396	393	356	372
3	475	599	345	230	258	448	411	398	406	451	363	365
4	468	597	418	249	213	585	443	455	399	421	388	400
5	474	597	390	229	127	471	371	431	444	414	381	83
6	463	599	320	323	60	462	329	430	400	398	318	0
7	444	600	100	540	171	444	375	398	408	343	390	0
8	462	480	134	499	145	586	409	373	389	351	388	.55
9	487	150	388	367	307	185	381	480	394	336	373	0
10	588	173	365	381	317	0	305	519	431	333	385	0
11	591	424	368	446	167	0	348	489	422	355	362	0
12	592	502	357	451	232	0	267	530	369	336	364	0
13	594	409	337	303	557	0	383	569	435	317	343	0
14	546	455	368	213	565	0	394	528	426	359	341	0
15	591	296	323	100	453	226	402	400	433	330	361	0
16	589	150	341	67	158	187	371	439	417	328	345	0
17	590	124	274	107	154	112	402	455	398	317	296	0
18	590	326	358	113	347	203	426	444	407	284	334	0
19	590	305	267	72	326	253	428	491	454	205	341	0
20	539	328	330	130	457	488	414	462	420	272	358	0
21	593	374	340	140	195	429	410	443	411	381	363	0
22	593	253	293	133	156	439	405	374	403	375	385	0
23	594	129	289	135	149	363	426	420	431	324	368	0
24	591	129	308	148	143	392	401	473	414	311	366	0
25	598	364	327	149	272	582	397	455	408	328	355	39
26	592	346	301	132	308	523	363	460	428	314	326	188
27	596	210	315	206	368	479	379	464	407	334	396	301
28	584	129	298	214	339	487	379	457	412	369	392	387
29	594	129	313	262	---	511	367	447	409	334	387	353
30	594	132	280	115	---	510	389	415	385	356	382	353
31	589	---	264	187	---	499	---	427	---	372	312	---
TOTAL	17180	10493	9625	7235	7575	10638	11781	13972	12392	10766	11194	3283.55
MEAN	554	350	310	233	271	343	393	451	413	347	361	109
MAX	596	600	418	540	565	586	576	569	454	451	396	442
MIN	444	124	100	67	60	0	267	373	369	205	296	0
AC-FT	34080	20810	19090	14350	15030	21100	23370	27710	24580	21350	22200	6510

CAL YR 1974 TOTAL 168461.66 MEAN 462 MAX 600 MIN 0 AC-FT 334100
WTR YR 1975 TOTAL 126134.55 MEAN 346 MAX 600 MIN 0 AC-FT 250200

11421770 BEAR RIVER BELOW DRUM AFTERBAY, NEAR BLUE CANYON, CALIF.

LOCATION.--Lat 39°15'16", long 120°46'26", in SW¼NW¼ sec.17, T.16 N., R.11 E., Placer County, on left bank 60 ft (18 m) below Drum Afterbay Dam, and 3.5 mi (5.6 km) west of Blue Canyon.

DRAINAGE AREA.--12.3 mi² (31.9 km²).

PERIOD OF RECORD.--April 1966 to current year, low flows only April to September 1966.

GAGE.--Water-stage recorder and 4-ft (1.2-m) steel Cipolletti weir set in a concrete broad-crested weir. Altitude of gage is 3,300 ft (1,006 m), from topographic map. April 1966 to May 25, 1967, water-stage recorder at present site at different datum, May 26, 1967, to Feb. 11, 1968, water-stage recorder at site 1,000 ft (305 m) downstream at different datum.

AVERAGE DISCHARGE.--9 years, 14.5 ft³/s (0.411 m³/s), 10,510 acre-ft/yr (13.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 159 ft³/s (4.50 m³/s) Mar. 18 (gage height, 1.83 ft or 0.558 m); minimum daily, 4.9 ft³/s (0.14 m³/s) Feb. 28.

Period of record: Maximum discharge, 2,880 ft³/s (81.6 m³/s) Jan. 21, 1970 (gage height, 3.68 ft or 1.122 m), from rating curve extended above 900 ft³/s (25.5 m³/s); minimum daily, 1.0 ft³/s (0.028 m³/s) Dec. 9, 1967.

REMARKS.--Water for Dutch Flat No. 1 powerplant (see sta 11421750) and Dutch Flat No. 2 flume (see sta 11421760) is diverted from Drum Afterbay just upstream from station. See schematic diagram of Bear River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	5.2	5.2	5.2	5.2	8.1	11	11	11	11	11	11
2	5.3	5.2	5.2	5.2	5.2	11	11	11	11	11	11	11
3	5.2	5.2	5.2	5.2	5.2	11	11	11	11	11	11	10
4	5.1	5.2	5.2	5.2	5.2	11	11	11	11	11	11	10
5	5.1	5.2	5.2	5.3	5.2	11	11	11	11	11	11	10
6	5.1	5.2	5.2	5.2	5.2	11	11	11	11	11	11	10
7	5.2	5.2	5.2	5.2	5.2	10	11	11	11	11	11	10
8	5.2	5.2	5.2	5.2	5.2	10	11	11	11	11	11	10
9	5.3	5.2	5.2	5.2	5.2	10	11	11	11	11	11	10
10	5.2	5.2	5.2	5.2	5.2	11	11	11	11	11	11	10
11	5.2	5.2	5.2	5.2	5.2	10	11	11	11	11	11	10
12	5.2	5.2	5.2	5.2	5.2	10	11	11	11	11	11	10
13	5.2	5.2	5.2	5.2	5.2	11	11	11	11	11	11	10
14	5.2	5.2	5.2	5.2	5.2	10	11	11	11	11	11	10
15	5.2	5.2	5.2	5.2	5.2	11	11	11	11	11	11	10
16	5.2	5.2	5.2	5.2	5.3	11	11	11	11	11	11	10
17	5.2	5.2	5.2	5.2	5.2	11	11	11	11	11	11	10
18	5.2	5.2	5.2	5.2	5.2	14	11	11	11	11	11	10
19	5.2	5.2	5.2	5.2	5.2	11	11	11	11	11	11	10
20	5.2	5.2	5.2	5.3	5.2	11	11	11	11	11	12	10
21	5.2	5.2	5.2	5.2	5.2	11	11	11	11	11	12	10
22	5.2	5.2	5.2	5.2	5.2	11	11	11	11	11	13	11
23	5.2	5.2	5.2	5.2	5.2	11	11	11	11	11	12	10
24	5.2	5.3	5.2	5.2	5.2	11	11	11	11	11	12	10
25	5.2	5.2	5.2	5.2	5.2	11	11	11	11	11	12	10
26	5.2	5.2	5.2	5.2	5.2	11	11	11	11	11	12	9.8
27	5.2	5.2	5.2	5.2	5.1	11	11	11	11	11	12	9.8
28	5.2	5.2	5.2	5.2	4.9	11	11	11	11	11	12	9.2
29	5.2	5.2	5.2	5.2	---	11	11	11	11	11	11	9.3
30	5.2	5.2	5.2	5.2	---	11	11	11	11	11	11	9.2
31	5.2	---	5.2	5.2	---	11	---	11	---	11	11	---
TOTAL	164.3	156.1	161.2	161.4	145.3	335.1	330	341	330	341	351	300.3
MEAN	5.30	5.20	5.20	5.21	5.19	10.8	11.0	11.0	11.0	11.0	11.3	10.0
MAX	8.4	5.3	5.2	5.3	5.3	14	11	11	11	11	13	11
MIN	5.1	5.2	5.2	5.2	4.9	8.1	11	11	11	11	11	9.2
AC-FT	326	310	320	320	288	665	655	676	655	676	696	596

CAL YR 1974 TOTAL 4631.9 MEAN 12.7 MAX 451 MIN 5.1 AC-FT 9190
WTR YR 1975 TOTAL 3116.7 MEAN 8.54 MAX 14 MIN 4.9 AC-FT 6180

11421780 CHICAGO PARK FLUME NEAR DUTCH FLAT, CALIF.

LOCATION.--Lat 39°12'55", long 120°50'23", in NW¼NE¼ sec.34, T.16 N., R.10 E., Nevada County, on left bank 670 ft (204 m) downstream from Dutch Flat Afterbay, and 0.6 mi (1.0 km) north of Dutch Flat.

PERIOD OF RECORD.--November 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,600 ft (792 m), from topographic map. Prior to Sept. 8, 1968, at site 420 ft (128 m) upstream at same datum.

AVERAGE DISCHARGE.--9 years, 663 ft³/s (18.78 m³/s), 480,300 acre-ft/yr (592 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,080 ft³/s (30.6 m³/s) Nov. 12, 13, 1973; no flow for several days in each year.

REMARKS.--Records good except flows below 70 ft³/s (1.98 m³/s), which are estimated. Flow regulated by Dutch Flat Afterbay. See schematic diagram of Bear River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	737	742	130	340	276	407	596	1030	989	900	854	833
2	739	782	422	339	394	502	824	1030	1030	938	853	832
3	788	850	429	339	395	594	604	1030	1030	981	855	831
4	792	775	532	330	217	547	646	1030	1030	979	902	831
5	786	769	526	287	206	575	600	1030	930	980	840	704
6	784	765	261	417	209	471	438	1030	858	936	831	29
7	776	784	127	785	222	632	471	1030	1010	886	862	0
8	681	698	123	712	226	777	611	708	1020	776	862	0
9	768	61	410	560	508	842	566	1040	837	795	862	0
10	769	141	412	537	440	390	492	1040	998	869	861	0
11	768	427	346	685	343	613	496	1040	990	869	845	0
12	775	608	359	624	210	554	603	1040	987	827	843	0
13	774	566	402	452	1000	258	637	1040	989	735	846	0
14	771	443	402	362	827	363	671	1040	917	777	845	0
15	770	338	313	149	671	510	670	1030	893	838	847	0
16	741	117	518	109	171	151	602	1030	912	836	842	0
17	707	84	227	120	214	174	589	1030	987	838	828	0
18	734	346	483	114	576	480	600	1030	989	838	731	0
19	826	276	277	108	427	334	644	1030	988	820	869	0
20	784	328	377	191	635	809	645	1030	987	732	871	0
21	787	486	400	212	297	743	644	1030	988	709	884	0
22	861	197	403	120	189	698	643	1030	955	900	898	0
23	717	90	349	117	291	532	725	1020	931	828	872	0
24	805	128	349	172	143	651	891	896	893	791	850	0
25	806	476	386	174	352	1050	1030	993	952	792	742	42
26	799	384	346	184	363	1040	1030	1030	1000	798	784	326
27	806	154	392	224	507	860	952	1030	1000	824	881	790
28	765	129	351	223	464	915	883	1030	938	828	918	853
29	797	130	342	251	---	868	1010	928	899	855	829	852
30	795	130	339	230	---	788	866	917	900	854	830	852
31	707	---	338	197	---	928	---	922	---	855	805	---
TOTAL	23915	12204	11071	9584	10773	19056	20679	31164	28827	26184	26242	7775
MEAN	771	407	357	309	385	615	689	1005	961	845	847	259
MAX	861	850	532	785	1000	1050	1030	1040	1030	981	918	853
MIN	681	61	123	108	143	151	438	708	837	709	731	0
AC-FT	47440	24210	21960	19010	21370	37800	41020	61810	57180	51940	52050	15420

CAL YR 1974 TOTAL 283991.97 MEAN 778 MAX 1050 MIN 0 AC-FT 563300
WTR YR 1975 TOTAL 227474.00 MEAN 623 MAX 1050 MIN 0 AC-FT 451200

11421790 BEAR RIVER BELOW DUTCH FLAT AFTERBAY, NEAR DUTCH FLAT, CALIF.

LOCATION.--Lat 39°12'55", long 120°50'23", in NE¼NW¼ sec.34, T.16 N., R.10 E., Placer County, at the left bank downstream end of spillway on Dutch Flat Afterbay Dam, 0.6 mi (1.0 km) north of Dutch Flat.

DRAINAGE AREA.--21.5 mi² (55.7 km²).

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 2,600 ft (790 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 31.9 ft³/s (0.903 m³/s), 23,110 acre-ft/yr (28.5 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 141 ft³/s (3.99 m³/s) May 13; minimum daily, 3.2 ft³/s (0.091 m³/s) Mar. 3.
Period of record: Maximum daily discharge, 1,500 ft³/s (42.5 m³/s) Jan. 20, 1969; minimum daily, 0.08 ft³/s (0.002 m³/s) Mar. 8-19, 1968.

REMARKS.--Records excellent. Water is imported from South Yuba River basin via Drum Canal above forebay (see sta 11414190). Chicago Park flume (see sta 11421780) diverts above station to Chicago Park powerplant. Records include spill over Dutch Flat Afterbay Dam. This station measures flow from Dutch Flat Afterbay in connection with a Federal Power Commission project. See schematic diagram of Bear River basin.

COOPERATION.--Records of elevations for Dutch Flat Afterbay furnished by Pacific Gas and Electric Co.

REVISIONS (WATER YEARS).--WRD Calif. 1967: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	6.9	5.0	5.0	4.8	4.8	4.8	9.1	8.3	8.8	9.4	9.6
2	9.6	5.0	5.0	5.0	4.8	4.8	4.8	8.8	8.3	9.1	9.4	9.6
3	9.1	5.0	5.0	5.0	4.8	3.2	5.0	8.8	8.3	9.1	9.4	9.4
4	9.1	5.0	5.0	5.0	4.8	4.2	4.8	9.1	8.1	8.8	9.4	9.1
5	8.8	5.0	5.0	5.0	4.8	5.0	4.8	9.1	8.3	8.8	9.4	9.1
6	8.8	5.0	5.0	5.0	4.8	5.0	4.8	9.1	8.6	8.8	9.6	18
7	8.6	5.0	5.0	5.0	4.8	5.0	5.0	9.1	8.6	8.8	9.6	79
8	8.6	5.0	5.0	5.0	4.8	4.8	4.8	126	8.3	8.6	9.6	64
9	8.8	5.0	5.0	5.0	4.8	4.8	4.8	47	8.3	8.8	9.6	11
10	8.6	5.0	5.0	5.0	4.8	4.8	4.8	90	8.3	8.8	9.6	11
11	8.6	5.0	5.0	5.0	4.8	4.8	5.0	54	8.6	8.8	9.6	11
12	8.6	5.0	5.0	5.0	4.8	4.8	5.0	92	8.3	8.8	9.6	11
13	8.6	5.0	5.0	5.0	4.8	5.0	4.8	141	8.3	8.8	9.6	16
14	8.6	5.0	5.0	5.0	4.6	5.0	4.8	90	8.3	8.8	9.6	19
15	8.6	5.0	5.0	5.0	4.6	5.0	4.8	35	8.6	8.8	9.6	19
16	8.6	5.0	5.0	5.0	4.6	5.0	4.8	7.9	8.6	8.8	9.6	19
17	8.6	5.0	5.0	5.0	4.6	5.0	4.8	7.6	8.6	8.8	9.6	19
18	8.8	5.0	5.0	5.0	4.6	5.0	5.0	7.6	8.8	8.8	9.6	19
19	8.8	5.0	5.0	5.0	4.6	5.0	4.8	7.6	8.8	8.6	9.6	13
20	8.8	5.0	5.0	5.0	4.6	5.0	4.8	7.6	8.8	8.6	9.9	8.6
21	8.6	5.0	5.0	5.0	4.6	5.0	4.8	7.6	8.6	8.6	9.6	8.6
22	8.6	5.0	5.0	4.8	4.8	5.0	4.8	7.6	8.6	8.6	9.6	8.6
23	8.8	5.0	5.0	4.8	4.8	5.0	4.8	7.8	8.6	8.6	9.6	8.6
24	8.8	5.0	5.0	4.8	4.8	5.0	4.8	8.3	8.8	8.6	9.6	8.6
25	8.8	5.0	5.0	4.8	4.8	50	4.8	8.3	8.8	8.6	9.6	8.8
26	8.8	5.0	5.0	4.8	4.8	4.8	4.8	8.3	8.8	8.6	9.6	8.8
27	8.8	5.0	5.0	4.8	4.8	4.8	4.8	8.3	8.8	8.6	9.6	9.1
28	8.8	5.0	5.0	4.8	4.8	4.8	5.0	8.1	8.6	8.6	9.6	8.8
29	8.8	5.0	5.0	4.8	------	4.8	4.8	8.1	8.8	8.8	9.6	8.8
30	8.8	5.0	5.0	4.8	------	4.8	6.4	8.3	8.8	8.8	9.6	8.8
31	8.8	------	5.0	4.8	------	4.8	------	8.3	------	9.1	9.6	------
TOTAL	272.9	151.9	155.0	153.0	132.8	194.8	146.8	865.4	256.3	271.5	296.9	471.9
MEAN	8.80	5.06	5.00	4.94	4.74	6.28	4.89	27.9	8.54	8.76	9.58	15.7
MAX	9.9	6.9	5.0	5.0	4.8	50	6.4	141	8.8	9.1	9.9	79
MIN	8.6	5.0	5.0	4.8	4.6	3.2	4.8	7.6	8.1	8.6	9.4	8.6
AC-FT	541	301	307	303	263	386	291	1,720	508	539	589	936

CAL YR 1974 TOTAL 16,447.5 MEAN 45.1 MAX 1,010 MIN 4.8 AC-FT 32,620
WTR YR 1975 TOTAL 3,369.2 MEAN 9.23 MAX 141 MIN 3.2 AC-FT 6,680

11421800 ROLLINS RESERVOIR NEAR COLFAX, CALIF.

LOCATION.--Lat 39°08'05", long 120°56'54", in NE¼SE¼ sec.22, T.15 N., R.9 E., Placer County, on left bank just upstream from Rollins Dam on Bear River, 2.3 mi (3.7 km) north of Colfax.

DRAINAGE AREA.--104 mi² (269 km²).

PERIOD OF RECORD.--December 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Nevada Irrigation District).

EXTREMES.--Current year: Maximum contents, 67,700 acre-ft (83.5 hm³) Mar. 24, 25 (elevation, 2,173.0 ft or 662.33 m); minimum, 37,700 acre-ft (46.5 hm³) June 31 (elevation, 2,129.5 ft or 649.07 m).
Period of record: Maximum contents, 70,100 acre-ft (86.4 hm³) Jan. 21, 1970 (elevation, 2,175.8 ft or 663.18 m); minimum since reservoir first filled, 28,100 acre-ft (34.6 hm³) Mar. 7, 1965 (elevation, 2,110.0 ft or 643.13 m).

REMARKS.--Reservoir is formed by earthfill dam. Storage began Dec. 15, 1964. Usable capacity, 66,000 acre-ft (81.4 hm³) between elevations 1,970.0 ft (600.46 m), invert of outlet tunnel and 2,171.0 ft (661.72 m), spillway crest, above mean sea level. Dead storage, 270 acre-ft (333,000 m³). Several diversions into and out of basin upstream for power development and irrigation. Stored water is released into Bear River, part of which is diverted to Pacific Gas and Electric's Bear River Canal for power development. Water is later used for irrigation. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Bear River basin.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

2,050	8,940	2,140	43,800
2,060	11,200	2,160	57,300
2,080	16,800	2,176	70,200
2,120	32,700		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39800	52100	47500	41300	37900	60000	66700	66800	66700	66500	66500	66500
2	39900	53400	47400	41000	39000	60600	66700	66800	66700	66500	66500	66500
3	40000	54700	47500	40800	39700	61200	66700	66800	66700	66500	66500	66500
4	40200	56000	47800	40600	40400	61600	66700	66800	66700	66500	66600	66500
5	40300	57300	48000	40400	40600	62300	66600	66800	66700	66500	66500	66500
6	40600	58100	47500	40600	40400	62600	66500	66800	66600	66500	66500	65500
7	40700	58500	46800	42000	40500	63900	66500	66800	66700	66600	66500	64400
8	40800	58700	46000	43900	40900	66700	66600	66700	66700	66500	66500	63500
9	41000	57500	45800	44400	42400	66900	66600	66700	66600	66500	66500	62300
10	41300	56600	45700	44800	45400	66600	66700	66800	66700	66500	66500	61200
11	41600	56300	45400	45300	46100	66700	66700	66800	66700	66600	66500	60100
12	41800	56500	45200	45800	46700	66600	66700	66800	66700	66500	66500	59000
13	42100	56600	45100	45900	51800	66300	66700	66900	66700	66400	66500	57800
14	42400	56300	44900	45900	53100	66300	66700	66800	66600	66400	66500	56800
15	42700	56000	44500	45400	54700	66600	66700	66700	66600	66400	66500	55700
16	42900	55200	44700	44800	55600	66300	66600	66700	66600	66500	66500	54500
17	43000	54400	44100	44200	55500	66200	66600	66700	66700	66500	66500	53400
18	43300	54100	44100	43600	56100	66600	66600	66700	66700	66500	66500	52300
19	43600	53700	43800	43000	57000	66700	66600	66700	66600	66500	66500	51200
20	43900	53300	43600	42600	58600	66900	66600	66700	66700	66400	66600	50000
21	44300	53400	43400	42100	59000	67000	66600	66700	66700	66300	66600	48900
22	44600	52900	43200	41500	59000	66900	66600	66700	66600	66500	66600	47700
23	44900	52100	43000	40900	59100	66600	66700	66700	66600	66500	66500	46600
24	45100	51400	42700	40400	58800	67700	66900	66700	66600	66500	66500	45400
25	45500	51300	42600	40000	58900	67700	66900	66700	66600	66500	66400	44200
26	45800	51100	42300	39600	59100	67200	66900	66700	66600	66500	66400	43500
27	46200	50500	42300	39200	59500	67000	66800	66700	66700	66500	66500	43900
28	47100	49800	42200	38800	59800	67000	66800	66700	66600	66500	66600	44500
29	48400	49000	42000	38500	---	66900	66900	66700	66600	66500	66500	45100
30	49700	48300	41700	38100	---	66800	66800	66700	66500	66500	66500	45700
31	50900	---	41500	37700	---	66900	---	66700	---	66500	66400	---
MAX	50900	58700	48000	45900	59800	67700	66900	66900	66700	66600	66600	66500
MIN	39800	48300	41500	37700	37900	60000	66500	66700	66500	66300	66400	43500
(a)	2,151.1	2,147.2	2,136.2	2,129.6	2,163.3	2,172.1	2,172.0	2,171.8	2,171.6	2,171.6	2,171.5	2,143.1
(b)	+11,100	-2,600	-6,800	-3,800	+22,100	+7,100	-100	-100	-200	0	-100	-20,700

CAL YR 1974 b -25,700
WTR YR 1975 b +5,900

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11422000 BEAR RIVER CANAL INTAKE NEAR COLFAX, CALIF.

LOCATION.--Lat 39°07'58", long 120°57'12", in SW¼SE¼ sec.22, T.15 N., R.9 E., Placer County, on right bank 600 ft (183 m) downstream from canal inlet, 0.2 mi (0.3 km) below Rollins Dam, and 2.2 mi (3.5 km) north of Colfax.

PERIOD OF RECORD.--January 1912 to September 1953, October 1964 to current year. Monthly discharge only for some periods published in WSP 1315-A. Prior to October 1912, published as Pacific Gas and Electric Co.'s Canal near Colfax, October 1912 to September 1953, published as Bear River Canal near Colfax.

GAGE.--Water-stage recorder. Altitude of gage is 1,980 ft (604 m), from topographic map. Prior to Mar. 25, 1946, water-stage recorder at site 1.5 mi (2.4 km) downstream at different datum.

AVERAGE DISCHARGE.--52 years (1912-53, 1964-75), 290 ft³/s (8.213 m³/s), 210,100 acre-ft/yr (259 hm³).

EXTREMES.--Period of record: Maximum daily discharge, 499 ft³/s (14.1 m³/s) Apr. 20-22, 1966, Aug. 1-3, 1967; no flow at times in most years.

REMARKS.--Canal diverts from left bank of Bear River. Water is first used to develop power at Halsey and Wise powerhouse, part of it is then distributed for irrigation and part is eventually spilled into North Fork American River. See schematic diagram showing diversion and storage in Bear River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	498	0	449	426	390	430	431	461	460	461	465	481
2	498	0	449	426	390	430	431	461	461	461	465	481
3	472	0	441	426	390	430	431	454	462	461	466	481
4	456	0	433	426	390	430	431	454	462	461	467	481
5	456	28	450	426	400	430	431	458	463	461	467	481
6	456	87	450	427	410	430	431	458	464	461	468	482
7	446	300	450	427	411	430	431	458	463	461	469	482
8	440	461	450	427	411	431	431	458	464	461	469	482
9	440	466	442	427	411	431	431	458	462	460	470	482
10	440	442	438	417	411	431	431	458	462	460	470	482
11	440	429	438	410	411	430	444	458	462	461	471	480
12	440	430	438	410	411	431	455	458	463	461	471	478
13	440	440	438	410	411	431	451	461	463	460	472	478
14	440	461	438	410	411	431	448	463	464	460	472	478
15	440	460	438	409	411	431	447	463	464	460	473	484
16	440	460	438	409	410	431	447	463	465	460	473	485
17	440	460	438	402	411	431	448	464	445	459	474	482
18	440	461	438	390	411	431	447	463	412	461	474	482
19	440	461	438	390	411	431	456	463	462	463	474	482
20	440	452	438	390	411	431	462	463	462	463	475	485
21	440	437	438	390	411	431	459	462	463	462	476	488
22	440	444	438	390	411	431	457	462	463	463	476	487
23	440	449	433	390	411	431	457	462	462	464	477	486
24	440	449	428	390	423	432	447	461	462	466	478	487
25	440	449	428	390	430	372	447	461	462	466	478	486
26	440	449	428	390	430	430	456	462	462	465	479	486
27	440	449	427	390	430	430	456	462	461	466	480	486
28	232	450	425	390	430	430	458	461	461	461	480	485
29	0	449	425	390	---	430	461	461	462	465	480	475
30	.10	449	426	391	---	430	461	461	462	465	480	468
31	0	---	426	391	---	431	---	460	---	465	480	---
TOTAL	12314.10	10772	13554	12577	11499	13290	13374	14272	13805	14324	14669	14463
MEAN	397	359	437	406	411	429	446	460	460	462	473	482
MAX	498	466	450	427	430	432	462	464	465	466	480	488
MIN	0	0	425	390	390	372	431	454	412	459	465	468
AC-FT	24430	21370	26880	24950	22810	26360	26530	28310	27380	28410	29100	28690

CAL YR 1974 TOTAL 160144.10 MEAN 439 MAX 498 MIN 0 AC-FT 317600
WTR YR 1975 TOTAL 158913.10 MEAN 435 MAX 498 MIN 0 AC-FT 315200

11422500 BEAR RIVER BELOW ROLLINS DAM, NEAR COLFAX, CALIF.

LOCATION.--Lat 39°07'53", long 120°57'29", in SE¼SW¼ sec.22, T.15 N., R.9 E., Nevada County, on right bank 65 ft (20 m) downstream from highway bridge, 0.5 mi (0.8 km) downstream from Rollins Dam, and 2.2 mi (3.5 km) north of Colfax.

DRAINAGE AREA.--105 mi² (272 km²).

PERIOD OF RECORD.--January 1912 to September 1913, October 1913 to July 1915 (gage heights and discharge measurements only), August 1915 to June 1917, November 1949 to September 1953, August 1964 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to August 1964, published as Bear River near Colfax. Records for November and December 1911 include diversion to Bear River Canal and are not equivalent.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,927.41 ft (587.475 m) above mean sea level. Prior to Aug. 8, 1915, nonrecording gages at several sites above diversion dam 0.3 mi (0.5 km) upstream at different datums. Aug. 8, 1915, to June 30, 1917, nonrecording gage 0.7 mi (1.1 km) downstream at different datum. Nov. 1, 1949, to Sept. 30, 1953, at site 0.2 mi (0.3 km) downstream at different datum.

AVERAGE DISCHARGE (unadjusted).--16 years (1912-13, 1915-16, 1950-53, 1964-75), 398 ft³/s (11.27 m³/s), 288,400 acre-ft/yr (35.6 km³/yr).

EXTREMES.--Current year: Maximum discharge, 5,480 ft³/s (155 m³/s) Mar. 25 (gage height, 7.89 ft or 2.405 m); minimum daily, 6.6 ft³/s (0.19 m³/s) Jan. 24.

Period of record: Maximum discharge (prior to construction of Rollins Dam in 1964), 9,620 ft³/s (272 m³/s) Nov. 20, 1950 (gage height, 21.40 ft or 6.523 m, site and datum then in use), from rating curve extended above 3,600 ft³/s (102 m³/s) on basis of slope-area measurement of maximum flow; no flow at times in 1912, 1952. Maximum discharge since construction of Rollins Dam, 12,700 ft³/s (360 m³/s) Jan. 21, 1970 (gage height, 11.72 ft or 3.572 m), from rating curve extended above 6,000 ft³/s (170 m³/s); minimum daily, 0.5 ft³/s (0.014 m³/s) Nov. 17, 1964.

REMARKS.--Records good. Flow regulated by Rollins Reservoir (see sta 11421800) beginning Dec. 15, 1964. Bear River Canal (see sta 11422000) diverts above station. See schematic diagram of Bear River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	243	202	20	17	19	14	644	820	586	413	344	329
2	244	202	19	17	29	15	748	832	627	432	340	334
3	244	203	26	20	22	15	530	882	637	477	340	333
4	245	184	29	24	23	16	591	916	631	492	362	334
5	232	151	30	24	10	18	632	866	592	490	349	256
6	217	270	30	31	11	19	390	844	433	465	318	115
7	219	296	29	31	11	26	357	826	536	419	330	79
8	211	233	27	38	14	97	468	609	588	325	350	78
9	197	130	22	33	27	965	494	805	493	290	366	77
10	203	99	19	26	22	606	438	862	499	345	359	75
11	205	93	18	20	21	486	405	895	554	364	339	80
12	206	93	21	21	24	484	454	893	555	355	333	82
13	198	82	23	20	32	187	521	956	554	282	333	80
14	189	43	23	17	17	196	566	915	514	245	333	79
15	190	19	22	18	13	243	563	901	449	307	336	77
16	191	18	22	20	15	257	482	793	448	333	333	78
17	191	17	21	19	15	140	408	774	524	339	328	78
18	192	16	21	16	15	134	386	763	573	336	273	76
19	193	19	20	18	20	305	412	755	547	332	424	75
20	195	31	20	20	15	811	407	740	530	253	382	79
21	196	35	20	22	11	875	405	725	528	253	429	77
22	197	21	20	21	9.7	1010	405	709	513	275	416	75
23	199	19	21	15	10	798	442	702	465	360	388	72
24	200	18	18	6.6	13	843	719	606	460	295	378	73
25	201	19	18	8.2	12	4430	1070	604	457	284	307	74
26	202	23	17	11	13	2230	973	674	518	283	262	73
27	204	22	19	8.1	13	1420	901	672	532	316	317	73
28	208	21	21	7.9	13	1170	727	669	503	315	392	74
29	190	20	19	7.2	---	1060	820	605	429	374	389	74
30	202	19	18	9.0	---	800	724	547	416	347	339	74
31	201	---	17	9.9	---	899	---	537	---	346	317	---
TOTAL	6414	2618	670	575.9	469.7	20587	17082	23697	15691	10742	10822	3533
MEAN	207	87.3	21.6	18.6	16.8	664	569	764	523	347	349	118
MAX	245	296	30	38	32	4430	1070	956	637	492	429	334
MIN	189	16	17	6.6	9.7	14	357	537	416	245	262	72
AC-FT	12720	5190	1330	1140	932	40830	33880	47000	31120	21310	21470	7010

CAL YR 1974 TOTAL 226014.0 MEAN 619 MAX 4770 MIN 16 AC-FT 448300
WTR YR 1975 TOTAL 112901.6 MEAN 309 MAX 4430 MIN 6.6 AC-FT 223900

11423700 NEW CAMP FAR WEST RESERVOIR NEAR WHEATLAND, CALIF.

LOCATION.--Lat 39°03'01", long 121°18'53", in NE¼SW¼ sec.21, T.14 N., R.6 E., on Yuba-Placer County line, in center of New Camp Far West Dam on the Bear River, 6.4 mi (10.3 km) east of Wheatland, and 11.8 mi (19.0 km) northeast of Sheridan.

DRAINAGE AREA.--285 mi² (733 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by South Sutter Water District).

EXTREMES.--Current year: Maximum contents, 112,200 acre-ft (138 hm³) Mar. 25 (elevation, 303.60 ft or 92.537 m); minimum, 65,200 acre-ft (80.4 hm³) Sept. 30 (elevation, 276.91 ft or 84.402 m).

Period of record: Maximum contents, 120,200 acre-ft (148 hm³) Jan. 21, 1970 (elevation, 307.3 ft or 93.66 m); minimum, 2,200 acre-ft (2.71 hm³) Oct. 11, 1968 (elevation, 175.0 ft or 53.34 m), may have been lower during period of no record Oct. 12-16, 1968.

REMARKS.--Reservoir is formed by an earthfill dam. Storage began Sept. 30, 1963. Usable capacity, 102,200 acre-ft (126 hm³) between elevations 175.0 ft (53.34 m), bottom of lowest river outlet and 300.0 ft (91.44 m), crest of spillway. Dead storage, 2,200 acre-ft (2.71 hm³). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Bear River basin.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

170	1,400	250	34,200
180	3,000	260	44,000
190	4,800	270	55,500
200	7,000	280	69,500
210	9,800	290	85,600
220	14,000	300	104,400
230	19,400	320	151,000
240	25,800		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81600	88000	95600	100600	105300	105100	106800	106100	105900	102300	88200	75900
2	81700	88400	96100	100600	107400	105100	106600	106400	105900	102100	87700	75600
3	81900	88800	96500	100600	107200	104800	106400	106600	105900	101800	87100	75300
4	82200	89200	96900	100800	107400	104800	106600	106600	105900	101800	86700	75100
5	82400	89500	97100	100800	106400	105100	107400	106600	105900	101600	86400	74800
6	82500	89900	97300	102300	105700	105100	107200	106600	105700	101400	85800	74300
7	82700	90700	97400	104400	105700	106100	106800	106600	105700	101200	85300	73700
8	82900	91800	97600	106100	106400	107700	106800	106400	105700	101000	84800	72900
9	83000	92600	97600	105500	107700	107400	106800	106400	105500	100500	84300	72200
10	83200	92900	97800	105300	107200	107000	106600	106400	105500	100100	83800	71600
11	83300	93100	97800	105100	106400	106600	106400	106600	105500	99500	83500	70900
12	83300	93300	98000	104800	109200	106400	106400	106600	105500	99100	83000	70300
13	83500	93500	98000	104800	109800	106400	106400	106600	105500	98800	82500	69700
14	83700	93500	98200	104600	107400	106400	106100	106600	105300	98000	82100	69100
15	83700	93700	98200	104600	106400	106100	106400	106600	105100	97400	81600	68500
16	83800	93700	98200	104600	105700	106800	106100	106400	104800	97100	81300	68200
17	84000	93700	98200	104400	105500	106400	106100	106400	104600	96500	80800	68000
18	84000	93900	98400	104400	105300	106100	105900	106400	104400	96100	80300	67500
19	84200	93900	98400	104400	105700	106600	105900	106100	104400	95600	80100	67100
20	84300	93900	98400	104400	105900	106000	105900	106100	104400	95000	80000	67000
21	84300	94200	98400	104400	105500	108300	105900	106100	104400	94400	79800	66700
22	84500	94400	98400	104400	105300	108300	105700	106100	104200	93700	79500	66400
23	84600	94600	98600	104400	105300	107700	105900	106100	104000	93100	79300	66300
24	84600	94800	98600	104400	105300	108500	106400	106100	103800	92600	79000	66100
25	84800	95000	98600	104400	105100	112200	107000	105900	103600	92000	78700	66000
26	84800	95400	98600	104400	105100	109600	107000	106100	103500	91200	78200	65900
27	84800	95400	98800	104400	105100	108300	106800	106100	103500	90700	77700	65700
28	84800	95600	99900	104400	105100	107700	106600	106100	103300	89900	77200	65600
29	85400	95600	100300	104400	---	107400	105900	106100	103100	89400	77100	65300
30	87100	95600	100500	104400	---	107000	105700	105900	102700	89200	76700	65200
31	87700	---	100500	104600	---	107000	---	105900	---	88600	76400	---
MAX	87700	95600	100500	106100	109800	112200	107400	106600	105900	102300	88200	75900
MIN	81600	88000	95600	100600	105100	104800	105700	105900	102700	88600	76400	65200
(a)	291.08	295.32	297.91	300.06	300.28	301.16	300.56	300.67	299.09	291.64	284.30	276.91
(b)	+6,300	+7,900	+4,900	+4,100	+500	+1,900	-1,300	+200	-3,200	-14,100	-12,200	-11,200

CAL YR 1974 b -8,000
WTR YR 1975 b -16,200

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11424000 BEAR RIVER NEAR WHEATLAND, CALIF.

LOCATION.--Lat 39°00'01", long 121°24'21", in SE¼SW¼ sec.3, T.13 N., R.5 E., Yuba County, on right bank 100 ft (30 m) downstream from bridge on U.S. Highway 99E, 1 mi (2 km) southeast of Wheatland, and 6.5 mi (10.5 km) downstream from Rock Creek.

DRAINAGE AREA.--292 mi² (756 km²).

PERIOD OF RECORD.--October 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 71.92 ft (21.921 m) above mean sea level. Prior to July 17, 1929, nonrecording gage at about same site at datum 9.58 ft (2.920 m) higher. July 17, 1929, to Oct. 22, 1943, water-stage recorder at several sites within 300 ft (90 m) of present site at datum 9.58 ft (2.920 m) higher. Oct. 23, 1943, to June 23, 1964, at site 100 ft (30 m) upstream at datum 7.00 ft (2.134 m) higher. June 23, 1964, to May 28, 1970, at present site at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE (adjusted for diversions and change in contents in New Camp Far West Reservoir since 1966).--46 years, 464 ft³/s (13.14 m³/s), 336,200 acre-ft/yr (415 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,900 ft³/s (252 m³/s) Mar. 25 (gage height, 13.05 ft or 3.978 m); minimum daily, 10 ft³/s (0.28 m³/s) Oct. 15, 16, 23-26.

Period of record: Maximum discharge, 33,000 ft³/s (935 m³/s) Dec. 22, 1955 (gage height, 19.30 ft or 5.883 m, site and datum then in use); maximum gage height, 20.83 ft (6.349 m) Nov. 21, 1950, site and datum then in use; no flow at times.

REMARKS.--Records good. Natural flow of stream affected by inflow from Yuba River and American River basins. Flow regulated by Lake Combie, usable capacity, 7,840 acre-ft (9.67 hm³), Rollins Reservoir since December 1964 (see sta 11421800), and New Camp Far West Reservoir since October 1963 (see sta 11423700). Many diversions for irrigation and power. See schematic diagram of Bear River basin.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	37	39	35	213	156	1170	283	75	19	20	22
2	12	37	39	35	1380	154	956	376	84	20	25	21
3	12	37	43	35	1960	150	845	427	114	21	25	23
4	13	37	35	35	2210	141	882	503	129	20	22	25
5	12	37	19	36	1540	140	1200	505	124	19	20	24
6	12	37	17	44	895	175	1520	461	101	23	19	24
7	12	39	16	43	617	269	1270	422	44	26	19	24
8	12	38	14	414	647	1070	1110	370	72	23	19	22
9	12	38	31	588	1640	1340	1090	233	79	20	22	18
10	13	38	31	411	2140	1240	1020	269	52	18	23	22
11	12	38	31	312	1280	869	883	346	25	18	23	29
12	13	39	32	236	1000	673	773	391	18	19	22	28
13	13	39	33	186	5700	629	739	400	21	20	22	27
14	12	39	33	161	2480	616	758	438	24	21	21	30
15	10	39	33	134	1040	577	755	399	22	19	21	29
16	10	38	33	128	572	824	760	377	19	20	20	23
17	11	38	33	118	405	778	655	313	18	21	19	20
18	12	39	33	112	318	571	567	276	17	17	24	16
19	13	39	33	107	308	496	498	249	17	19	27	19
20	14	39	33	104	450	736	482	250	17	20	27	22
21	14	41	33	102	404	1010	493	239	19	18	27	25
22	12	40	33	100	313	2340	431	227	23	18	26	20
23	10	40	33	95	260	1730	387	229	24	19	24	17
24	10	40	33	89	228	1320	432	224	22	20	23	23
25	10	40	33	92	210	6700	842	170	19	19	23	31
26	10	40	33	92	194	5470	977	146	21	20	22	29
27	12	40	35	98	179	3000	882	167	20	22	22	18
28	17	40	48	85	164	2040	762	165	23	30	22	14
29	41	40	36	79	---	1680	786	168	23	22	26	15
30	28	39	36	77	---	1440	712	140	21	19	25	17
31	37	---	35	86	---	1250	---	104	---	18	24	---
TOTAL	443	1162	999	4269	28747	39584	24637	9267	1287	628	704	677
MEAN	14.3	38.7	32.2	138	1027	1277	821	299	42.9	20.3	22.7	22.6
MAX	41	41	48	588	5700	6700	1520	505	129	30	27	31
MIN	10	37	14	35	164	140	387	104	17	17	19	14
AC-FT	879	2300	1980	8470	57020	78510	48870	18380	2550	1250	1400	1340
(a)	4,862	0	0	0	0	0	4,362	29,140	28,201	30,367	29,699	13,498

CAL YR 1974 TOTAL 240038 MEAN 658 MAX 10000 MIN 10 AC-FT 476100 MEAN b 831 AC-FT b 601,800
WTR YR 1975 TOTAL 112404 MEAN 308 MAX 6700 MIN 10 AC-FT 223000 MEAN b 479 AC-FT b 346,900

a Diversion, in acre-feet, to Camp Far West North and South Canals and South Sutter conveyance canal, furnished by South Sutter Water District.

b Adjusted for diversions and change in contents in New Camp Far West Reservoir.

11424000 BEAR RIVER NEAR WHEATLAND, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water year 1953 (partial-record station), October 1953 to September 1970, water year 1971 (partial-record station), October 1971 to September 1972, water year 1973 (partial-record station), October 1973 to current year.

REMARKS.--Records furnished by California Department of Water Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
OCT. 08...	0845	12	10	4.4	54	0	44
DEC. 05...	1330	42	8.4	4.3	43	0	35
JAN. 08...	1430	610	6.9	3.4	30	0	25
FEB. 06...	0945	938	7.0	3.2	33	0	27
APR. 02...	1030	944	7.5	3.5	37	0	30
MAY 05...	1200	511	5.6	3.5	38	0	31
JUNE 02...	1200	84	--	3.8	37	0	30
AUG. 01...	1130	21	--	5.0	64	0	52
SEP. 18...	0845	17	9.9	4.2	45	0	37

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO
OCT. 08...	3.8	65	.09	2.11	53	9	--
DEC. 05...	3.1	67	.09	7.60	41	6	--
JAN. 08...	3.2	54	.07	88.9	36	11	--
FEB. 06...	3.2	66	.09	167	30	3	--
APR. 02...	2.7	38	.05	96.9	34	4	--
MAY 05...	3.4	59	.08	81.4	37	6	--
JUNE 02...	--	64	.09	14.5	36	6	.3
AUG. 01...	--	88	.12	4.99	69	16	.3
SEP. 18...	4.2	62	.08	2.85	46	9	--

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
OCT. 08...	0845	12	120	7.3	19.5	0	8.0
DEC. 05...	1330	42	96	7.8	13.5	0	12.1
JAN. 08...	1430	610	71	7.2	10.5	50	11.0
FEB. 06...	0945	938	72	7.2	9.0	4	11.5
MAR. 06...	0800	168	90	7.3	11.5	--	10.3
APR. 02...	1030	944	82	7.3	11.0	11	11.2
MAY 05...	1200	511	84	7.4	17.0	1	10.3
JUNE 02...	1200	84	85	7.4	23.5	--	8.6
JULY 07...	1030	27	121	7.8	24.0	--	9.7
AUG. 01...	1130	21	127	7.6	28.0	--	9.9
SEP. 18...	0845	17	103	7.3	22.0	0	7.7

11425000 FEATHER RIVER NEAR NICOLAUS, CALIF.

LOCATION.--Lat 38°53'26", long 121°26'12", in SE¼NE¼ sec.14, T.12 N., R.3 E., Sutter County, on left bank 1.7 mi (2.7 km) southwest of Nicolaus, 4.2 mi (6.8 km) downstream from Bear River, and at mile 8.1 (13.0 km). Prior to Oct. 1, 1974, at site 1.3 mi (2.1 km) upstream.

DRAINAGE AREA.--5,921 mi² (15,335 km²).

PERIOD OF RECORD.--June 1921 to December 1942 (low-water periods only), April 1943 to current year. Prior to October 1974, published as "at Nicolaus."

GAGE.--Water-stage recorder. Datum of gage is 3.30 ft (1.006 m) below mean sea level. Prior to November 1931, on middle fender pier of bridge 1.6 mi (2.6 km) upstream at same datum. November 1931 to September 1974, at highway bridge 1.3 mi (2.1 km) upstream at same datum.

AVERAGE DISCHARGE.--32 years (1943-75), 8,381 ft³/s (237.3 m³/s), 6,072,000 acre-ft/yr (7.49 km³/yr).

EXTREMES.--Current year: Maximum discharge, 33,500 ft³/s (949 m³/s) Feb. 14 (gage height, 37.05 ft or 11.293 m); minimum daily, 3,200 ft³/s (90.6 m³/s) June 29.
Period of record: Maximum discharge (1943 to current year), 357,000 ft³/s (10,100 m³/s) Dec. 23, 1955; maximum gage height, 51.60 ft (15.728 m) Dec. 23, 1955; no flow Aug. 2-18, 1924, July 11-22, 24, 26, Aug. 1, 1931.

REMARKS.--Records good. Flow partly regulated by many reservoirs, total capacity, 6,868,000 acre-ft (8.47 km³), the largest of which are Lake Oroville (see sta 11406800) completed in 1968, Lake Almanor (see sta 11399000) completed in 1913, and New Bullards Bar Reservoir (see sta 11413515) completed in 1969. Diversions for irrigation of about 87,000 acres (352 km²) between stations at Oroville and near Nicolaus.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8350	4500	14200	6730	5540	3980	6620	10200	6200	3610	8270	6720
2	8400	4340	14200	6500	13100	3800	6600	9800	6400	3600	8060	6740
3	8390	4230	14400	6460	16500	4000	6600	10500	6580	3900	7450	6800
4	8420	4210	14600	6450	11400	4100	6900	11100	7000	3750	7300	6760
5	8420	4200	14800	6370	9130	4500	7400	11300	7500	3740	7530	6770
6	8320	4220	15200	6490	6240	4700	8200	11600	10400	3740	7480	6830
7	8290	4260	14800	7430	4930	5300	7860	11100	11800	3750	7580	6820
8	8340	4480	14000	8160	4790	7600	7570	10900	12800	3640	7350	6930
9	8460	4420	13900	8910	8320	9300	7100	10800	13400	3610	7340	7240
10	8540	4330	13300	8190	10900	7600	6800	11100	13800	3620	7280	7270
11	8520	4280	10900	7730	7550	6300	6450	11200	13600	3790	6730	7200
12	8490	4280	8900	7290	5480	5500	6200	11300	12600	4960	6620	7170
13	8410	4290	8330	6720	24300	6000	6180	12100	11500	6320	6600	7120
14	8350	5280	7740	6370	26200	6400	6200	12300	10700	7240	6610	7060
15	8420	7900	6740	5490	12900	7400	6220	11900	9930	7340	6630	7080
16	8410	8300	6560	5170	7690	7100	6230	11600	9450	7340	6640	7160
17	8340	8340	6570	4960	5800	6900	6180	11300	9170	7350	6640	7170
18	8280	8500	6550	4930	5500	7600	6000	11000	7460	7210	6730	7150
19	8250	8910	6510	4800	5000	9600	6040	10500	6580	7150	6800	7190
20	8180	9150	6430	4750	5300	9300	6060	10200	6130	7180	6890	7240
21	8040	9540	6470	4920	5200	10800	6060	9530	5110	7250	6810	6440
22	8160	11500	6470	5030	5000	12300	6100	7280	4450	7830	6710	5610
23	8150	12400	6330	5000	4800	11700	6500	6760	4310	7810	6760	5570
24	7460	12700	6310	4920	4700	9620	6860	5100	3770	8310	6870	5650
25	5980	13200	6340	4860	4600	16600	7840	4480	3930	8400	6990	5710
26	4680	13500	6290	4840	4350	21200	8180	4600	4960	8340	6940	5710
27	4390	14000	6350	4770	4250	13800	8320	4800	4620	8210	6890	5690
28	4530	14200	6990	4710	4150	10800	9130	5200	3580	7730	6990	5700
29	4540	14200	7480	4450	---	9630	10400	5500	3200	8200	6830	5740
30	4460	14200	7240	4190	---	8800	10500	6000	3490	8190	6790	5760
31	4510	---	6940	4230	---	7710	---	6400	---	8120	6790	---
TOTAL	232400	241860	291840	181820	233620	259260	213280	287370	234480	191230	217820	198000
MEAN	7497	8062	9414	5865	8344	8363	7109	9270	7816	6169	7026	6600
MAX	8540	14200	15200	8910	26200	21200	10500	12300	13800	8400	8270	7270
MIN	4390	4200	6290	4190	4150	3800	6000	4480	3200	3600	6600	5570
AC-FT	461000	479700	578900	360600	463400	514200	423000	570000	465100	379300	432000	392700

CAL YR 1974 TOTAL 5655050 MEAN 15490 MAX 105000 MIN 4200 AC-FT 11220000
WTR YR 1975 TOTAL 2782980 MEAN 7625 MAX 26200 MIN 3200 AC-FT 5520000

11425000 FEATHER RIVER NEAR NICOLAUS, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: March 1951 to June 1966.
Water temperatures: March 1951 to September 1958, November 1959 to current year. Published as sta 11425100 for period 1964-74.

EXTREMES.--Current year:
Water temperatures: Maximum, 23.0°C July 22; minimum, 6.5°C on several days during December to February.
Period of record:
Water temperatures: Maximum (1951-58, 1959 to current year): Maximum, 34.5°C July 21, 1961; minimum (1951-58, 1959-66, 1967 to current year), freezing point Jan. 3-6, 1961.

REMARKS.--Prior to 1964 water year, thermograph located at gaging station at Nicolaus (sta 11425000), 1.3 mi (2.1 km) upstream. Records from October 1964 to September 1974 were obtained 2.5 mi (4.0 km) downstream and are considered equivalent.

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	17.0	15.0	14.0	10.5	10.0	7.0	6.5	7.5	6.5	11.0	10.0
2	17.5	17.5	15.0	13.0	10.0	10.0	7.0	6.5	8.5	7.5	10.0	10.0
3	18.0	16.5	14.5	13.0	10.5	10.0	7.0	6.5	9.0	8.0	10.5	10.0
4	17.5	16.0	14.5	13.0	11.0	10.5	7.5	6.5	9.0	8.5	10.5	10.0
5	17.5	15.5	14.5	13.0	10.5	10.5	7.5	7.0	9.0	8.5	11.0	10.0
6	17.0	15.0	14.5	13.0	10.5	10.5	8.0	7.5	9.0	8.5	11.0	10.0
7	17.0	15.0	14.0	13.0	10.5	10.0	9.0	8.0	9.0	8.5	11.0	9.5
8	17.0	15.5	14.0	12.5	10.0	10.0	9.0	8.5	10.5	9.0	11.0	10.0
9	17.0	15.5	14.0	12.0	10.0	9.5	9.0	8.0	11.5	10.5	---	---
10	17.0	15.0	14.0	12.0	9.5	9.5	8.0	8.0	10.5	10.0	---	---
11	16.5	15.0	14.0	12.5	10.0	9.5	8.5	7.5	10.5	10.0	---	---
12	16.5	15.0	14.5	12.5	10.5	10.0	8.0	7.5	10.5	10.0	---	---
13	17.0	15.0	14.5	13.0	10.0	9.5	8.5	7.5	10.5	10.0	---	---
14	17.0	15.5	14.0	13.0	10.0	9.5	8.5	8.0	10.5	10.0	---	---
15	17.0	15.5	13.5	13.0	10.5	9.5	8.5	7.5	10.0	9.0	---	---
16	16.5	15.5	13.0	12.5	10.0	9.5	8.5	8.0	9.5	9.0	---	---
17	16.5	15.5	13.0	12.5	10.0	9.5	8.5	8.0	9.0	9.0	---	---
18	16.5	15.5	13.0	12.0	9.5	9.0	8.5	8.0	9.0	9.0	---	---
19	16.5	16.0	13.0	12.0	9.0	9.0	8.5	8.0	9.0	8.5	---	---
20	16.5	15.0	12.5	11.5	9.0	9.0	8.5	8.0	9.0	8.5	---	---
21	16.0	14.5	12.5	12.0	9.0	8.5	9.0	8.0	9.0	7.5	---	---
22	15.5	14.0	12.0	11.5	8.5	8.0	9.0	8.0	10.0	8.5	---	---
23	15.0	14.0	12.0	11.5	8.0	7.5	8.5	8.0	10.5	9.5	---	---
24	14.5	13.5	11.5	11.0	7.5	7.0	9.0	8.0	11.5	9.5	---	---
25	15.0	13.5	11.5	11.0	7.5	7.0	9.5	8.0	11.5	10.0	---	---
26	15.5	14.5	11.0	11.0	7.5	7.0	9.5	8.0	11.0	9.5	---	---
27	15.5	14.0	11.0	10.5	7.5	7.5	8.0	7.0	12.0	9.5	---	---
28	15.5	14.5	10.5	10.0	8.0	7.0	8.0	6.5	12.0	10.0	---	---
29	15.5	14.0	10.5	10.0	7.0	6.5	7.5	6.5	---	---	---	---
30	15.0	14.0	10.5	10.0	7.5	7.0	7.5	7.5	---	---	---	---
31	14.5	14.0	---	---	7.0	6.5	7.5	6.5	---	---	---	---
MONTH	18.0	13.5	15.0	10.0	11.0	6.5	9.5	6.5	12.0	6.5	---	---

11425000 FEATHER RIVER NEAR NICOLAUS, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	15.0	14.0	18.5	18.5	19.0	18.5	22.0	22.0	21.0	20.5
2	12.0	10.0	15.5	14.0	18.5	18.0	19.0	18.5	22.0	22.0	20.5	20.5
3	11.0	10.0	15.0	14.0	18.0	18.0	19.0	18.5	22.0	22.0	21.0	20.5
4	10.0	9.0	14.0	13.0	18.5	18.0	19.0	18.5	22.0	22.0	21.0	20.5
5	9.5	9.0	14.0	12.5	19.0	18.5	19.0	18.5	22.0	22.0	21.0	21.0
6	10.5	9.0	14.0	13.0	19.5	19.0	19.5	18.5	22.0	22.0	21.0	21.0
7	9.5	9.5	14.5	13.5	19.5	19.0	19.5	19.0	22.0	22.0	21.0	21.0
8	10.0	9.0	15.0	14.0	19.5	19.5	20.0	19.5	22.0	21.5	21.0	21.0
9	11.5	9.0	15.0	14.5	19.5	19.0	20.5	20.0	21.5	21.5	21.0	20.5
10	11.5	10.0	15.0	14.5	19.5	19.0	20.5	20.0	22.0	21.5	21.0	20.5
11	12.0	10.5	15.5	14.5	20.0	19.5	21.0	20.0	22.0	22.0	20.0	19.5
12	12.5	10.5	16.0	15.0	19.5	19.5	21.5	21.0	22.0	22.0	20.0	20.0
13	12.5	11.5	16.0	15.5	19.5	19.5	22.0	21.5	22.0	22.0	20.0	20.0
14	12.0	10.5	16.5	15.5	19.5	19.5	22.5	22.0	22.0	21.5	20.0	20.0
15	11.0	9.5	16.0	15.5	20.0	19.5	22.5	22.0	22.0	21.5	20.0	20.0
16	12.0	10.5	16.0	15.5	20.0	19.5	22.0	21.5	21.5	21.5	20.0	20.0
17	12.5	10.5	16.5	15.5	19.5	19.5	22.5	22.0	21.5	21.5	20.0	20.0
18	12.5	11.0	17.0	16.0	19.5	19.5	22.5	22.0	21.5	21.0	20.0	20.0
19	13.0	11.5	17.5	17.0	19.5	19.0	22.5	22.0	21.0	21.0	20.0	19.5
20	13.5	11.5	17.0	16.0	19.0	19.0	22.5	22.0	21.0	21.0	20.0	19.5
21	14.0	12.5	16.0	15.5	19.5	19.0	22.5	22.5	21.5	21.0	20.5	19.5
22	13.5	12.5	16.0	16.0	19.5	19.0	23.0	22.5	21.5	21.0	21.5	20.0
23	13.0	12.0	16.5	16.0	19.5	19.0	22.5	22.5	21.5	21.5	22.0	20.0
24	13.0	13.0	17.0	16.5	19.5	19.0	22.5	22.5	22.0	21.5	21.5	20.0
25	13.0	12.5	17.0	16.5	19.0	18.5	22.5	22.5	22.0	22.0	21.0	19.5
26	14.0	13.0	17.0	17.0	19.0	19.0	22.5	22.5	22.0	22.0	20.5	19.0
27	15.0	13.5	17.5	17.0	19.5	19.0	22.5	22.5	22.0	21.5	20.0	18.5
28	15.0	14.0	17.5	17.5	19.5	19.0	22.5	22.5	21.0	21.0	19.5	18.0
29	14.5	13.5	18.0	17.5	19.5	19.0	22.5	22.5	21.0	21.0	19.0	17.5
30	14.5	13.5	18.0	17.5	19.5	19.0	22.5	22.0	21.0	21.0	19.0	17.5
31	---	---	18.5	18.0	---	---	22.0	22.0	21.0	21.0	---	---
MONTH	15.0	9.0	18.5	12.5	20.0	18.0	23.0	18.5	22.0	21.0	22.0	17.5

11425500 SACRAMENTO RIVER AT VERONA, CALIF.

LOCATION.--Lat 38°46'51", long 121°36'12", in SW¼SE¼ sec.23, T.11 N., R.3 E., Sutter County, on left bank 0.8 mi (1.3 km) southeast of Verona, 1 mi (2 km) downstream from Feather River, 6.2 mi (10.0 km) east of Knights Landing, and at mile 19.6 (31.5 km) upstream from Sacramento.

DRAINAGE AREA.--21,257 mi² (55,056 km²).

PERIOD OF RECORD.--May 1926 to September 1929 (low-water periods only), October 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3.00 ft (0.914 m) below mean sea level.

AVERAGE DISCHARGE.--46 years (1929-75), 19,150 ft³/s (542.3 m³/s), 13,870,000 acre-ft/yr (17.1 km³/yr).

EXTREMES.--Current year: Maximum discharge, 63,700 ft³/s (1,800 m³/s) Mar. 26 (gage height, 34.17 ft or 10.415 m); minimum daily, 12,700 ft³/s (360 m³/s) July 11.

Period of record: Maximum discharge, 79,200 ft³/s (2,240 m³/s) Mar. 1, 1940 (gage height, 41.20 ft or 12.558 m); minimum daily, 304 ft³/s (8.61 m³/s) July 23, 24, 1931; maximum reverse flow, 16,800 ft³/s (476 m³/s) Dec. 4, 1950, backwater from American River.

Maximum combined discharge of Sacramento River at Verona and Fremont weir, about 322,000 ft³/s (9,120 m³/s) Dec. 25, 1964.

REMARKS.--Records excellent. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, return flow from irrigated areas, and bypassing for flood control. When discharge exceeds about 55,000 ft³/s (1,560 m³/s) flow begins over Fremont weir (just upstream) into Yolo Bypass (see sta 11453000). Gage height of crest of Fremont weir is 33.5 ft (10.21 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17800	16200	26700	19500	14600	24000	52100	23900	21000	13100	16600	19500
2	17900	16900	26700	17800	22700	22100	44700	23800	20600	12900	16800	19800
3	17600	17100	27000	16800	35700	21300	38400	24300	20900	12900	16600	19900
4	17600	16200	28000	16400	37900	21400	33700	25200	21100	12900	16400	20200
5	17800	15000	32100	16100	35200	21500	31200	26000	21400	12900	16700	20400
6	17800	14100	35300	16100	30400	21300	30900	27100	22900	13000	16700	20000
7	17800	13400	33400	17000	27000	21300	30900	26600	24700	13200	16600	19700
8	17700	13400	31000	20500	27000	25600	29900	25800	26200	13200	16500	19300
9	17800	13500	29400	23600	34500	36300	28500	25400	26900	13200	16500	18700
10	17800	13900	28500	25500	41600	39800	28300	25700	27100	12900	16600	18800
11	17900	14600	26500	23500	44500	45900	27400	26500	26700	12700	16400	19100
12	17900	15600	24000	21300	45200	51200	26000	27200	25700	13400	16000	19500
13	18000	16200	22600	19200	51000	52500	24800	27900	24100	14600	15800	19700
14	17700	16600	21900	17700	60700	52300	24000	28600	23000	15800	15800	19700
15	17800	19000	20700	16500	61000	50100	24100	28900	22000	16200	15900	19600
16	17700	20200	20100	15600	60900	47500	24700	29200	21100	16300	16000	19300
17	17600	20400	19900	15100	59000	45200	24300	29500	20700	16800	16100	19100
18	17400	20500	19700	14700	56300	42800	22700	29200	19800	17400	16500	19000
19	17200	20800	19400	14400	52300	41800	21800	28700	18500	17300	17200	18700
20	17200	21100	18600	14300	48000	43900	21200	29000	17700	17100	17900	18600
21	17300	21500	17800	15000	44300	49000	20000	29500	16900	17200	18600	18000
22	18000	23000	17500	15100	41700	58600	20200	28400	16100	17200	19000	17000
23	18600	24300	17200	15100	39000	61500	19300	26400	15600	17900	18900	16400
24	18500	24800	16800	14800	36000	61900	19300	23700	14900	17600	18700	16200
25	16900	25300	16700	14600	33500	62800	20100	21200	14200	17300	18500	16000
26	14500	25700	16700	14500	31500	63400	22300	20300	14400	17300	18400	15800
27	13800	26100	16600	14200	29300	62300	24300	19800	14800	17400	18400	15600
28	14100	26500	17100	13800	26800	61800	24800	20200	14200	16900	18300	15400
29	14600	26600	20900	13700	---	60600	24900	20800	13400	16800	18500	15500
30	15000	26700	24100	13200	---	58800	24500	20700	13300	16700	18600	15500
31	15500	---	22100	13200	---	56600	---	20800	---	16700	19000	---
TOTAL	530800	585200	715000	518800	1127600	1385100	810100	790300	599900	476800	534500	550000
MEAN	17120	19510	23060	16740	40270	44680	27000	25490	20000	15380	17240	18330
MAX	18600	26700	35300	25500	61000	63400	52100	29500	27100	17900	19000	20400
MIN	13800	13400	16600	13200	14600	21300	19300	19800	13300	12700	15800	15400
AC-FT	1053000	1161000	1418000	1029000	2237000	2747000	1607000	1568000	1190000	945700	1060000	1091000

CAL YR 1974 TOTAL 11690200 MEAN 32030 MAX 74900 MIN 13400 AC-FT 23190000
WTR YR 1975 TOTAL 8624100 MEAN 23630 MAX 63400 MIN 12700 AC-FT 17110000

11426000 SACRAMENTO WEIR SPILL TO YOLO BYPASS, NEAR SACRAMENTO, CALIF.

LOCATION.--Lat 38°36'25", long 121°33'15" (unsurveyed), Sacramento County, 2 gages on right bank, one 100 ft (30 m) upstream from weir and one 100 ft (30 m) downstream from weir, 3.2 mi (5.1 km) upstream from American River, 4 mi (6 km) northwest of Sacramento, and at mile 4.2 (6.8 km) upstream from Sacramento.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for water years 1940-51, published in WSP 1735. Published as Sacramento weir near Sacramento 1939-61. Gage-height records collected at same site February 1926 to September 1934 and major flood flows only October 1934 to September 1939 are contained in reports of California Department of Water Resources.

GAGE.--Water-stage recorders and concrete weir crest. Datum of gage is 3.00 ft (0.914 m) below mean sea level. October 1939 to September 1942, October 1959 to September 1963, water-stage recorder or nonrecording gage at downstream end of weir. October 1942 to September 1959, water-stage recorder on left bank at Sacramento River opposite center of weir. Since February 1963, water-stage recorders on right bank 100 ft (30 m) upstream and 100 ft (30 m) downstream from ends of weir.

AVERAGE DISCHARGE.--36 years, 213 ft^3/s (6.032 m^3/s), 154,300 acre-ft/yr (1.90 km^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 178 ft^3/s (5.04 m^3/s) Mar. 26; no flow most of year.
Period of record: Maximum discharge, 118,000 ft^3/s (3,340 m^3/s) Mar. 26, 1928; maximum gage height, 33.01 ft (10.061 m) Dec. 23, 1955; no flow all or most of each year.

REMARKS.--Crest of weir is at gage height 22.0 ft (6.71 m) and top of moveable gates at 28.0 ft (8.53 m). Weir consists of 48 gates each 38.1 ft (11.61 m) long. Flow over weir enters Yolo Bypass by way of Sacramento Bypass. Flow regulated by weir gates. Flow for the current year consisted of leakage through weir gates only. Since February 1963, stage is obtained by averaging the stage obtained at sites above and below the weir.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	0						
2					0	0						
3					0	0						
4					0	0						
5					0	0						
6					0	0						
7					0	0						
8					0	0						
9					0	0						
10					0	0						
11					0	0						
12					0	0						
13					0	0						
14					87	0						
15					103	0						
16					101	0						
17					50	0						
18					0	0						
19					0	0						
20					0	0						
21					0	0						
22					0	17						
23					0	87						
24					0	102						
25					0	143						
26					0	178						
27					0	158						
28					0	140						
29					---	109						
30					---	60						
31		---			---	2.5	---		---			---
TOTAL	0	0	0	0	341	996.5	0	0	0	0	0	0
MEAN	0	0	0	0	12.2	32.1	0	0	0	0	0	0
MAX	0	0	0	0	103	178	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	676	1980	0	0	0	0	0	0

CAL YR 1974 TOTAL 23535.00 MEAN 64.5 MAX 3590 MIN 0 AC-FT 46680
WTR YR 1975 TOTAL 1337.50 MEAN 3.66 MAX 178 MIN 0 AC-FT 2650

11426150 ONION CREEK NEAR SODA SPRINGS, CALIF.

LOCATION.--Lat 39°16'02", long 120°21'5[illegible]", in SE¼NE¼ sec.11, T.16 N., R.14 E., Placer County, Tahoe National Forest, on right bank 0.3 mi (0.5 km) upstream from unnamed tributary, 1 mi (2 km) upstream from mouth, and 4.0 mi (6.5 km) south of Soda Springs.

DRAINAGE AREA.--3.58 mi^2 (9.27 km^2).

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,900 ft (1,798 m), from topographic map.

AVERAGE DISCHARGE.--16 years, 9.93 ft^3/s (0.281 m^3/s), 7,190 acre-ft/yr (8.87 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 161 ft^3/s (4.56 m^3/s) May 31 (gage height, 2.64 ft or 0.805 m); minimum daily, 0.13 ft^3/s (0.004 m^3/s) Oct. 21, 22.
Period of record: Maximum discharge, 1,750 ft^3/s (49.6 m^3/s) Dec. 23, 1964 (gage height, 4.98 ft or 1.518 m in gage well, 6.82 ft or 2.079 m, from floodmarks), from rating curve extended above 120 ft^3/s (3.40 m^3/s) on basis of slope-area measurement of maximum flow; minimum daily, 0.10 ft^3/s (0.003 m^3/s) for several days in 1959, 1961, 1973.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.44	.67	.67	1.5	4.2	3.9	8.6	96	8.7	1.2	.60
2	.16	.44	.59	.67	1.5	3.6	3.6	14	87	8.0	1.1	.58
3	.19	.44	1.2	.76	1.4	3.6	3.6	15	83	7.4	1.1	.56
4	.19	.44	1.2	.86	1.4	3.9	3.3	11	82	6.9	1.0	.54
5	.19	.44	.86	.98	1.4	3.9	3.1	8.6	85	6.5	.98	.52
6	.19	.44	.76	1.1	1.4	3.6	2.9	8.1	83	6.2	.98	.50
7	.19	.51	.76	1.1	1.5	3.3	2.9	12	66	5.7	.94	.49
8	.22	.68	.76	.98	2.3	3.1	2.7	20	56	5.2	.90	.49
9	.22	.54	.76	.86	2.7	2.9	2.5	27	51	4.7	.86	.49
10	.19	.51	.76	.76	2.5	2.5	2.5	37	47	4.5	.83	.48
11	.19	.50	.76	.76	1.1	2.3	2.3	42	45	4.2	.80	.49
12	.16	.50	1.4	.76	1.1	2.1	2.5	46	42	3.7	.77	.57
13	.16	.50	1.2	.86	1.2	2.1	3.3	55	42	3.4	.75	.52
14	.16	.49	.98	1.1	1.2	2.1	3.6	71	37	3.3	.72	.50
15	.19	.49	1.2	1.1	1.2	2.1	3.3	58	35	3.3	.70	.49
16	.19	.49	1.4	.98	1.2	2.1	3.1	55	30	3.2	.69	.49
17	.19	.51	1.1	1.4	1.2	2.1	2.9	67	26	3.0	.70	.48
18	.16	.74	1.1	1.5	1.2	1.8	2.9	83	22	2.8	1.5	.47
19	.16	.66	1.1	1.8	1.2	1.8	3.1	83	20	2.7	2.5	.45
20	.16	.59	.98	2.1	1.2	1.8	3.3	58	19	2.6	1.3	.44
21	.13	.76	.98	2.1	1.1	1.7	5.5	42	18	2.5	2.2	.43
22	.13	.76	.98	2.3	.98	1.7	7.3	43	16	2.3	1.0	.42
23	.16	.76	.86	2.5	1.1	1.7	6.8	52	16	2.2	.85	.41
24	.16	.86	.82	3.1	1.4	2.5	6.8	71	14	2.0	.77	.40
25	.16	.86	.79	3.3	1.8	6.3	6.8	72	15	1.9	.76	.40
26	.16	.76	.78	2.7	2.1	3.9	5.5	80	13	1.7	.73	.39
27	.22	.76	.76	2.5	2.3	3.1	5.5	82	12	1.6	.72	.39
28	.51	.67	.74	2.0	3.3	3.1	5.9	82	11	1.5	.70	.39
29	.33	.67	.71	1.8	---	2.9	7.3	83	9.9	1.4	.68	.40
30	.33	.59	.67	1.6	---	3.6	8.3	87	9.2	1.3	.65	.40
31	.51	---	.67	1.5	---	4.5	---	103	---	1.2	.63	---
TOTAL	6.42	17.80	28.30	46.50	43.40	89.9	127.0	1576.3	1188.1	115.6	30.01	14.18
MEAN	.21	.59	.91	1.50	1.55	2.90	4.23	50.8	39.6	3.73	.97	.47
MAX	.51	.86	1.4	3.3	3.3	6.3	8.3	103	96	8.7	2.5	.60
MIN	.13	.44	.59	.67	.98	1.7	2.3	8.1	9.2	1.2	.63	.39
AC-FT	13	35	56	92	86	178	252	3130	2360	229	60	28

CAL YR 1974 TOTAL 4833.28 MEAN 13.2 MAX 107 MIN .13 AC-FT 9590
WTR YR 1975 TOTAL 3283.59 MEAN 9.00 MAX 103 MIN .13 AC-FT 6510

Peak discharge (base, 50 ft^3/s).--May 18 (1930) 131 ft^3/s (2.54 ft); May 31 (1800) 161 ft^3/s (2.64 ft).

11426190 LAKE VALLEY CANAL NEAR EMIGRANT GAP, CALIF.

LOCATION.--Lat 39°17'58", long 120°39'11", in NE¼NW¼ sec.32, T.17 N., R.12 E., Placer County, Tahoe National Forest, on right bank 0.2 mi (0.3 km) upstream from inlet to Carpenter Flat siphon, and 1 mi (2 km) east of Emigrant Gap.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,360 ft (1,634 m), from topographic map.

AVERAGE DISCHARGE.--11 years, 13.8 ft^3/s (0.391 m^3/s), 10,000 acre-ft/yr (12.3 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 40 ft^3/s (1.133 m^3/s) Mar. 29, 1974; no flow many days in each year.

REMARKS.--Canal diverts from right bank of the North Fork of North Fork American River, 2.7 mi (4.3 km) downstream from Lake Valley Reservoir to the Drum Canal in the Bear River basin. See schematic diagram of Bear River and Yuba River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	33					0	19	32	16	35	35
2	35	33					0	24	31	18	35	35
3	35	33					0	20	33	21	35	34
4	35	33					0	11	36	19	35	34
5	35	34					0	15	35	17	35	24
6	34	34					0	22	35	16	35	2.4
7	33	34					0	24	35	32	35	.72
8	34	33					0	24	34	37	35	.11
9	36	33					0	26	33	36	35	.08
10	34	33					0	29	34	34	35	.05
11	33	34					0	30	36	34	35	.06
12	34	33					0	30	33	34	35	.01
13	36	32					0	30	34	30	35	0
14	36	31					8.5	30	36	33	35	0
15	36	30					32	28	36	30	35	0
16	36	28					3.6	27	36	29	35	0
17	35	19					4.1	27	35	29	35	0
18	33	2.6					3.4	28	34	33	35	0
19	27	1.5					3.4	27	33	34	36	0
20	29	0					3.6	25	33	34	35	0
21	33	0					10	24	34	34	35	0
22	33	0					20	23	34	34	34	0
23	33	0					14	24	32	35	34	0
24	34	0					9.5	28	34	34	34	0
25	34	0					6.4	31	32	34	34	.80
26	34	0					9.3	31	22	34	34	31
27	34	0					9.2	31	14	34	34	32
28	35	0					9.2	32	14	35	36	32
29	34	0			---		10	32	14	35	35	33
30	34	0			---		12	33	15	35	35	33
31	34	---			---		---	34	---	35	35	---
TOTAL	1053	544.1	0	0	0	0	168.2	819	929	945	1081	327.23
MEAN	34.0	18.1	0	0	0	0	5.61	26.4	31.0	30.5	34.9	10.9
MAX	36	34	0	0	0	0	32	34	36	37	36	35
MIN	27	0	0	0	0	0	0	11	14	16	34	0
AC-FT	2090	1080	0	0	0	0	334	1620	1840	1870	2140	649

CAL YR 1974 TOTAL 8148.36 MEAN 22.3 MAX 40 MIN 0 AC-FT 16160
WTR YR 1975 TOTAL 5866.53 MEAN 16.1 MAX 37 MIN 0 AC-FT 11640

11426200 NORTH FORK FORBES CREEK NEAR DUTCH FLAT, CALIF.

LOCATION.--Lat 39°08'37", long 120°45'30", in NW¼SE¼ sec.17, T.15 N., R.11 E., Placer County, Tahoe National Forest, on right bank 0.2 mi (0.3 km) downstream from Big Reservoir, and 6.0 mi (9.7 km) southeast of Dutch Flat.

DRAINAGE AREA.--1.68 mi^2 (4.35 km^2).

PERIOD OF RECORD.--July 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,980 ft (1,213 m), from topographic map.

AVERAGE DISCHARGE.--19 years, 4.78 ft^3/s (0.135 m^3/s), 3,460 acre-ft/yr (4.27 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 62 ft^3/s (1.76 m^3/s) Mar. 25 (gage height, 3.09 ft or 0.942 m); minimum daily, 0.20 ft^3/s (0.006 m^3/s) on many days.

Period of record: Maximum discharge, 377 ft^3/s (10.7 m^3/s) Jan. 22, 1970 (gage height, 4.76 ft or 1.451 m); no flow many days in 1964-66.

Maximum stage known, 6.40 ft (1.951 m) probably Dec. 23, 1955, from floodmarks (discharge unknown).

REMARKS.--Flow regulated by Big Reservoir, capacity, 2,200 acre-ft (2.71 hm^3). Some diversion above station for mining.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	.30	.30	.30	.20	1.1	16	12	1.6	3.0	2.8	3.3
2	2.4	.30	.30	.30	.20	2.3	14	11	1.5	3.1	2.8	3.1
3	2.4	.30	.40	.30	.20	7.5	13	12	1.5	3.1	2.8	3.1
4	2.4	.30	.40	.30	.20	7.1	13	12	1.3	3.1	2.8	2.9
5	2.4	.30	.30	.30	.20	6.6	13	11	1.1	3.2	2.8	2.8
6	1.6	.30	.30	.60	.20	6.9	12	9.9	1.0	3.1	2.8	2.8
7	.20	.30	.20	.70	.30	7.5	11	8.9	.90	3.1	2.8	2.7
8	.20	.30	.20	.90	.40	16	9.8	8.7	.90	3.1	2.7	2.6
9	.20	.30	.20	.40	1.0	24	8.9	9.5	.70	3.1	2.7	2.6
10	.20	.30	.20	.30	.80	22	8.3	9.4	.60	3.1	2.7	2.6
11	.20	.30	.20	.30	.50	18	7.6	8.1	.60	3.1	2.7	2.6
12	.20	.30	.20	.30	.50	15	7.6	7.3	.60	3.1	2.7	2.5
13	.20	.30	.20	.30	1.2	12	8.4	6.6	.60	2.9	2.7	2.4
14	.20	.30	.20	.30	.60	11	8.5	5.9	.60	2.8	2.7	2.4
15	.20	.30	.20	.30	.40	9.6	9.2	5.5	.60	2.8	3.0	2.3
16	.20	.30	.20	.30	.40	9.8	9.9	5.1	.80	2.8	3.7	2.2
17	.20	.30	.20	.30	.40	7.8	10	4.9	1.7	2.8	3.9	2.2
18	.20	.30	.20	.20	.30	6.6	9.7	4.5	1.6	2.8	4.2	2.2
19	.20	.30	.20	.20	.60	6.2	9.6	4.2	2.1	2.8	4.5	2.2
20	.30	.30	.20	.20	.70	7.9	9.3	3.9	3.5	2.8	4.3	2.2
21	.30	.40	.30	.20	.50	8.5	9.2	3.8	2.8	2.8	4.2	2.1
22	.30	.30	.30	.20	.40	10	9.2	3.7	2.8	2.8	4.1	2.1
23	.30	.30	.30	.20	.40	9.4	9.2	3.6	2.8	2.8	4.0	2.1
24	.30	.30	.30	.20	.40	12	13	3.5	2.8	2.8	3.8	2.0
25	.30	.30	.30	.20	.40	53	17	3.5	2.8	2.8	3.6	2.0
26	.30	.30	.30	.20	.40	55	16	3.4	2.8	2.9	3.6	1.9
27	.40	.30	.30	.20	.50	41	15	3.1	2.8	2.9	3.5	1.9
28	.40	.30	.30	.20	1.1	31	14	2.8	2.9	2.9	3.5	1.9
29	.30	.30	.30	.20	---	26	13	2.4	2.9	2.8	3.5	1.9
30	.30	.30	.30	.20	---	22	12	2.1	2.9	2.8	3.4	1.9
31	.30	---	.30	.20	---	19	---	2.0	---	2.8	3.4	---
TOTAL	20.00	9.10	8.10	9.30	13.40	491.8	336.4	194.3	52.10	90.8	102.7	71.5
MEAN	.65	.30	.26	.30	.48	15.9	11.2	6.27	1.74	2.93	3.31	2.38
MAX	2.4	.40	.40	.90	1.2	55	17	12	3.5	3.2	4.5	3.3
MIN	.20	.30	.20	.20	.20	1.1	7.6	2.0	.60	2.8	2.7	1.9
AC-FT	40	18	16	18	27	975	667	385	103	180	204	142

CAL YR 1974 TOTAL 2665.80 MEAN 7.30 MAX 89 MIN .20 AC-FT 5290
WTR YR 1975 TOTAL 1399.50 MEAN 3.83 MAX 55 MIN .20 AC-FT 2780

11426400 NORTH SHIRTTAIL CREEK NEAR DUTCH FLAT, CALIF.

LOCATION.--Lat 39°07'49", long 120°47'44", in NW¼SE¼ sec.24, T.15 N., R.10 E., Placer County, Tahoe National Forest, on right bank 200 ft (61 m) downstream from Forbes Creek, and 7.0 mi (11.3 km) southeast of Dutch Flat.

DRAINAGE AREA.--9.10 mi² (23.57 km²).

PERIOD OF RECORD.--July 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,500 ft (1,067 m), from topographic map.

AVERAGE DISCHARGE.--19 years, 21.7 ft³/s (0.615 m³/s), 15,720 acre-ft/yr (19.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 615 ft³/s (17.4 m³/s) Mar. 25 (gage height, 4.49 ft or 1.369 m); minimum daily, 0.30 ft³/s (0.008 m³/s) on many days.

Period of record: Maximum discharge, 1,780 ft³/s (50.4 m³/s) Dec. 22, 1964 (gage height, 7.56 ft or 2.304 m), from rating curve extended above 590 ft³/s (16.7 m³/s) on basis of slope-area measurement at gage height 6.36 ft (1.939 m); minimum daily, 0.10 ft³/s (0.003 m³/s) many days in 1970.

Flood of Dec. 23, 1955, reached a stage of 7.30 ft (2.225 m), from floodmarks (discharge, 1,650 ft³/s or 46.7 m³/s).

REMARKS.--Flow slightly regulated by Big Reservoir, capacity, 2,200 acre-ft (2.71 hm³).

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	1.3	.90	3.2	5.6	37	75	44	5.4	1.6	.70	.50
2	.30	.90	.90	2.8	10	43	70	43	5.2	1.5	.70	.50
3	.30	.80	7.8	2.8	7.2	50	67	42	5.1	1.5	.60	.50
4	.30	.70	12	2.9	7.6	47	65	42	4.8	1.5	.50	.50
5	.30	.70	5.0	3.2	6.5	49	63	42	4.5	1.5	.50	.40
6	.40	.70	3.5	28	6.6	54	60	41	4.1	1.4	.60	.40
7	.40	1.1	3.0	36	9.4	70	55	40	3.8	1.3	.50	.40
8	.40	1.4	2.7	66	25	123	51	40	3.8	1.3	.50	.40
9	.40	.90	2.4	21	111	112	49	39	3.1	1.3	.50	.50
10	.40	.80	2.1	13	88	97	50	35	2.8	1.2	.50	.50
11	.40	.70	2.0	9.5	49	83	54	32	2.6	1.1	.40	.50
12	.30	.60	2.3	7.5	48	74	57	28	2.5	1.1	.40	.50
13	.30	.60	2.7	6.3	164	69	59	26	2.3	1.0	.40	.40
14	.30	.60	2.6	5.5	82	67	60	24	2.0	1.1	.40	.50
15	.30	.60	2.5	5.0	57	64	59	22	2.0	1.2	.40	.50
16	.30	.50	2.4	4.6	44	64	57	21	1.9	1.4	.40	.40
17	.30	.50	2.4	4.3	35	57	56	20	1.9	1.4	.40	.40
18	.30	1.1	2.5	4.0	30	57	53	19	2.0	1.3	1.4	.50
19	.30	.80	2.5	3.7	65	79	50	18	2.1	1.2	1.7	.40
20	.30	.70	2.4	3.5	73	81	49	16	2.3	1.1	1.3	.40
21	.30	4.8	2.5	3.3	54	73	48	16	1.9	1.0	1.3	.40
22	.30	3.7	2.7	3.2	45	71	50	14	1.8	.90	1.0	.40
23	.30	2.1	2.4	3.1	39	67	49	14	1.8	.80	.80	.40
24	.30	1.4	2.3	3.0	36	112	48	12	3.1	.90	.70	.50
25	.30	2.4	2.2	2.9	34	412	48	12	2.9	.80	.70	.50
26	.30	1.7	2.1	2.9	32	214	47	11	2.4	.70	.70	.50
27	.40	1.4	2.4	2.9	32	159	46	10	2.1	.60	.70	.50
28	3.9	1.2	3.5	2.9	34	125	46	9.0	2.0	.70	.70	.60
29	1.4	1.0	3.1	2.7	---	104	45	8.3	1.9	.70	.60	.60
30	.88	.90	3.0	2.7	---	92	44	7.5	1.8	.70	.60	.50
31	1.7	---	2.8	2.5	---	83	---	6.9	---	.60	.60	---
TOTAL	16.60	36.60	93.60	264.9	1229.9	2889	1630	754.7	85.9	34.40	21.20	14.00
MEAN	.54	1.22	3.02	8.55	43.9	93.2	54.3	24.3	2.86	1.11	.68	.47
MAX	3.9	4.8	12	66	164	412	75	44	5.4	1.6	1.7	.60
MIN	.30	.50	.90	2.5	5.6	37	44	6.9	1.8	.60	.40	.40
AC-FT	33	73	186	525	2440	5730	3230	1500	170	68	42	28

CAL YR 1974 TOTAL 10143.90 MEAN 27.8 MAX 363 MIN .30 AC-FT 20120
WTR YR 1975 TOTAL 7070.80 MEAN 19.4 MAX 412 MIN .30 AC-FT 14020

11427000 NORTH FORK AMERICAN RIVER AT NORTH FORK DAM, CALIF.

LOCATION.--Lat 38°56'10", long 121°01'22", in SW¼NW¼ sec.31, T.13 N., R.9 E., Placer County, on left bank 50 ft (15 m) upstream from spillway of North Fork Dam, 2 mi (3 km) upstream from Middle Fork, and 4 mi (6 km) northeast of Auburn.

DRAINAGE AREA.--342 mi² (886 km²).

PERIOD OF RECORD.--October 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 715.0 ft (217.93 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--34 years, 840 ft³/s (23.79 m³/s), 608,600 acre-ft/yr (750 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,600 ft³/s (329 m³/s) Mar. 25 (gage height, 5.33 ft or 1.625 m); minimum daily, 46 ft³/s (1.30 m³/s) Sept. 25.

Period of record: Maximum discharge, 65,400 ft³/s (1,850 m³/s) Dec. 23, 1964 (gage height, 11.87 ft or 3.618 m), from rating curve extended above 24,000 ft³/s (680 m³/s) on basis of computed flow over spillway of dam at gage height 10.22 ft (3.115 m); no flow Aug. 27-30, Sept. 2-11, 1944, Oct. 5, 6, 1963, Nov. 7-10, 1965, caused by operation of valve in North Fork Dam.

REMARKS.--Records good except those for August and September, which are poor. Minor regulation by Lake Clementine, usable capacity, 12,800 acre-ft (15.8 hm³) formed by North Fork Dam. Storage in Big Reservoir and Lake Valley Reservoir, combined capacity, 10,300 acre-ft (12.7 hm³) above station. Lake Valley Canal (see sta 11426190) diverts from North Fork of North Fork American River into Bear River basin for power development in powerhouses of Pacific Gas and Electric Co. Combined storage and diversion have small effect on natural flow.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	106	81	130	275	1070	1430	1350	3560	544	119	75
2	52	93	77	122	1060	1120	1280	1490	3160	517	114	70
3	52	81	109	115	892	1090	1200	1810	2850	505	110	69
4	52	81	577	124	1140	1010	1190	1940	2820	481	105	68
5	52	81	371	135	783	1010	1220	1480	2890	457	100	66
6	52	81	213	382	548	1120	1180	1290	3060	445	95	64
7	55	81	165	1100	513	1310	1160	1300	2880	432	92	62
8	55	81	145	1790	675	2610	1100	1520	2360	408	91	61
9	52	81	131	956	2250	2150	1060	1920	2140	373	88	61
10	55	73	121	549	2910	1650	1050	2260	2010	350	86	62
11	55	73	116	413	1610	1400	1010	2650	1870	326	85	62
12	52	69	116	337	1240	1220	1030	2790	1830	317	83	62
13	49	69	158	299	3720	1160	1050	3010	1860	294	81	60
14	49	69	188	283	2720	1120	1150	3450	1880	265	80	58
15	55	69	150	273	1650	1100	1150	3510	1770	255	78	58
16	55	65	136	264	1270	1350	1030	2850	1650	261	77	53
17	55	69	131	252	1040	1250	957	3000	1480	257	76	52
18	52	73	131	247	869	1130	905	3480	1160	243	91	52
19	49	81	121	261	937	1200	867	3710	911	229	132	51
20	49	77	111	267	1670	1550	858	3140	830	216	138	51
21	49	99	111	267	1270	1420	941	1960	831	203	130	50
22	49	212	111	260	1050	2100	1120	1740	818	191	149	50
23	52	155	116	249	913	1620	1140	1990	801	178	117	49
24	52	111	112	249	856	1700	1290	2540	829	167	101	48
25	52	111	107	253	846	8620	2790	2920	735	159	92	46
26	52	116	106	261	848	4910	1750	2820	722	151	87	49
27	52	101	117	263	837	3140	1440	2920	630	144	83	48
28	134	93	242	228	921	2260	1350	2850	608	138	82	49
29	182	89	188	209	---	1820	1340	3000	596	132	80	50
30	101	81	144	199	---	1610	1390	3030	579	128	79	51
31	93	---	133	192	---	1580	---	3280	---	123	77	---
TOTAL	1917	2721	4835	10929	35313	57400	36428	77000	50120	8889	2998	1707
MEAN	61.8	90.7	156	353	1261	1852	1214	2484	1671	287	96.7	56.9
MAX	182	212	577	1790	3720	8620	2790	3710	3560	544	149	75
MIN	49	65	77	115	275	1010	858	1290	579	123	76	46
AC-FT	3800	5400	9590	21680	70040	113900	72250	152700	99410	17630	5950	3390

CAL YR 1974 TOTAL 393268 MEAN 1077 MAX 11600 MIN 49 AC-FT 780000
WTR YR 1975 TOTAL 290257 MEAN 795 MAX 8620 MIN 46 AC-FT 575700

Peak discharge (base, 4,300 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-13	1330	3.61	4,590	5-19	0330	3.61	4,590
3-25	0830	5.33	11,600	6-1	0300	3.53	4,340

11427000 NORTH FORK AMERICAN RIVER AT NORTH FORK DAM, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: November 1959 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 26.0°C July 24-27; minimum, 5.0°C Jan. 30, 31.
Period of record:
Water temperatures: Maximum, 28.0°C Aug. 4, 5, 1974; minimum, 4.5°C Jan. 21, 1967.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.5	23.5	18.0	17.5	11.5	11.5	6.5	5.5	6.5	5.5	10.0	9.0
2	23.5	23.5	17.5	17.5	11.5	11.5	6.5	5.0	---	---	10.0	9.0
3	23.5	23.5	17.5	17.0	11.5	11.0	6.5	5.0	---	---	10.0	9.0
4	23.5	23.0	17.0	16.5	11.0	11.0	7.0	6.5	---	---	9.5	8.5
5	23.0	23.0	16.5	16.5	11.0	11.0	7.0	6.0	---	---	9.5	8.5
6	23.0	22.5	16.5	16.5	11.0	10.5	7.5	6.5	---	---	9.0	8.5
7	22.5	22.5	16.5	16.0	10.5	10.5	6.5	6.5	---	---	---	---
8	22.5	22.5	16.0	16.0	10.5	10.0	6.5	6.0	---	---	---	---
9	22.5	22.5	15.5	15.5	10.0	9.5	7.5	7.0	---	---	---	---
10	22.5	22.0	15.5	15.0	9.5	9.5	7.5	7.0	---	---	---	---
11	22.0	22.0	15.0	15.0	9.5	9.5	7.5	6.5	---	---	---	---
12	22.0	22.0	15.0	15.0	9.5	9.5	7.0	6.5	---	---	---	---
13	22.0	22.0	15.0	15.0	9.5	9.5	7.0	6.0	---	---	---	---
14	22.0	22.0	15.0	15.0	9.5	9.0	7.0	6.0	8.5	8.0	---	---
15	22.0	21.5	15.0	14.5	9.0	9.0	7.0	6.0	8.5	7.5	---	---
16	21.5	21.0	14.5	14.5	9.0	9.0	7.0	6.0	8.0	7.5	---	---
17	21.0	20.5	14.5	14.5	9.0	9.0	7.0	6.0	7.5	7.0	---	---
18	20.5	20.5	14.5	14.0	9.0	8.5	7.0	6.0	7.0	6.5	---	---
19	20.5	20.5	14.0	14.0	8.5	8.0	6.5	5.5	7.0	6.5	---	---
20	20.5	20.5	14.0	14.0	8.5	8.0	7.0	5.5	7.0	6.5	---	---
21	20.5	20.0	14.0	14.0	8.5	8.0	6.5	6.0	7.5	7.0	---	---
22	20.0	19.5	14.0	14.0	8.5	7.0	7.0	5.5	7.5	6.5	---	---
23	19.5	19.5	14.0	14.0	7.5	6.0	7.0	6.0	8.0	6.5	---	---
24	19.5	19.0	14.5	13.5	7.5	6.0	7.0	6.0	8.5	7.0	---	---
25	19.0	19.0	13.5	13.0	7.5	6.0	7.5	6.5	9.0	7.5	---	---
26	19.0	19.0	13.0	13.0	7.0	6.0	7.5	5.5	9.5	8.0	9.0	8.0
27	19.0	19.0	13.0	12.5	7.5	7.0	6.5	5.5	10.0	8.5	8.5	7.5
28	19.0	18.5	12.5	12.5	8.0	7.0	6.0	5.5	9.5	9.0	8.0	7.5
29	18.5	18.5	12.5	12.0	7.0	6.0	6.5	5.5	---	---	8.0	7.0
30	18.5	18.0	12.0	11.5	7.5	6.5	6.0	5.0	---	---	9.0	7.0
31	18.0	18.0	---	---	7.0	6.0	5.5	5.0	---	---	9.5	8.5
MONTH	23.5	18.0	18.0	11.5	11.5	6.0	7.5	5.0	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	9.0	12.0	10.5	13.0	11.5	18.5	16.5	24.5	21.5	22.5	20.0
2	10.5	8.5	12.0	10.5	12.5	11.5	19.0	17.0	25.0	22.0	22.5	20.0
3	---	---	12.0	10.5	12.5	11.5	19.0	16.5	25.0	22.0	22.5	20.0
4	---	---	10.5	9.0	13.0	12.0	19.5	16.5	25.0	22.5	23.0	20.0
5	---	---	10.5	8.5	13.0	12.0	20.0	17.5	24.5	22.0	23.5	20.5
6	---	---	10.5	8.5	13.5	12.5	21.0	18.0	24.5	22.5	23.5	20.5
7	---	---	11.0	9.0	14.0	12.5	21.5	19.0	23.5	20.5	23.5	20.5
8	7.5	7.0	12.0	10.5	13.5	12.5	22.5	20.0	24.0	21.0	22.5	21.0
9	8.0	7.0	12.5	11.5	14.0	12.5	23.0	20.5	24.5	21.5	23.5	21.0
10	8.5	7.0	12.5	11.5	14.0	13.0	23.0	21.5	24.5	21.5	22.0	20.5
11	9.5	8.0	12.0	10.5	14.5	13.5	23.5	21.0	24.5	22.0	22.5	20.5
12	10.0	9.0	11.5	11.0	14.5	13.5	23.5	21.5	24.5	22.0	23.0	20.5
13	10.5	9.5	12.0	10.5	15.5	14.5	24.0	21.5	24.0	21.5	23.5	20.5
14	11.0	10.0	12.0	10.5	15.5	15.0	24.0	21.0	24.0	21.5	23.0	20.5
15	11.0	10.0	11.5	10.0	16.0	15.0	22.5	21.0	24.0	21.5	23.0	20.5
16	10.0	9.0	11.0	10.0	16.5	15.0	23.5	21.0	24.0	21.5	23.0	20.5
17	10.0	8.0	11.5	10.0	16.5	15.0	24.0	21.0	23.5	21.5	23.5	21.0
18	10.0	8.0	12.0	11.0	17.0	14.5	24.0	21.0	23.0	21.0	23.5	21.0
19	10.5	9.0	12.0	10.5	16.0	14.5	24.5	21.5	23.0	21.0	22.5	20.5
20	11.5	9.5	12.0	10.5	16.5	14.5	25.0	22.0	23.5	22.5	23.0	20.5
21	12.0	10.5	10.5	9.0	17.0	15.0	25.0	22.5	23.5	22.0	23.5	21.0
22	11.5	10.5	11.0	9.5	18.0	16.0	25.5	22.5	24.0	21.5	23.0	20.5
23	11.5	10.0	12.0	10.5	17.5	15.0	25.5	23.0	23.5	21.0	23.0	20.5
24	11.0	9.5	12.5	11.5	16.5	15.5	26.0	23.0	23.5	20.5	23.0	20.5
25	10.0	9.0	12.5	11.5	17.0	14.5	26.0	23.5	24.0	21.5	22.5	20.0
26	9.0	7.5	12.5	11.5	17.0	15.0	26.0	23.5	23.5	22.0	22.5	20.0
27	9.0	7.5	12.5	11.0	17.5	15.0	26.0	24.0	22.5	20.0	22.0	19.5
28	10.0	8.0	12.5	11.5	18.0	15.5	25.5	23.5	23.0	20.5	21.5	19.0
29	11.0	9.5	12.5	11.5	18.5	15.5	25.5	23.0	22.5	20.5	21.0	19.0
30	12.0	10.0	12.5	11.0	18.5	16.0	24.0	21.5	22.5	20.0	21.0	19.0
31	---	---	12.5	11.5	---	---	24.0	21.5	22.5	20.0	---	---
MONTH	12.0	7.0	12.5	8.5	18.5	11.5	26.0	16.5	25.0	20.0	23.5	19.0

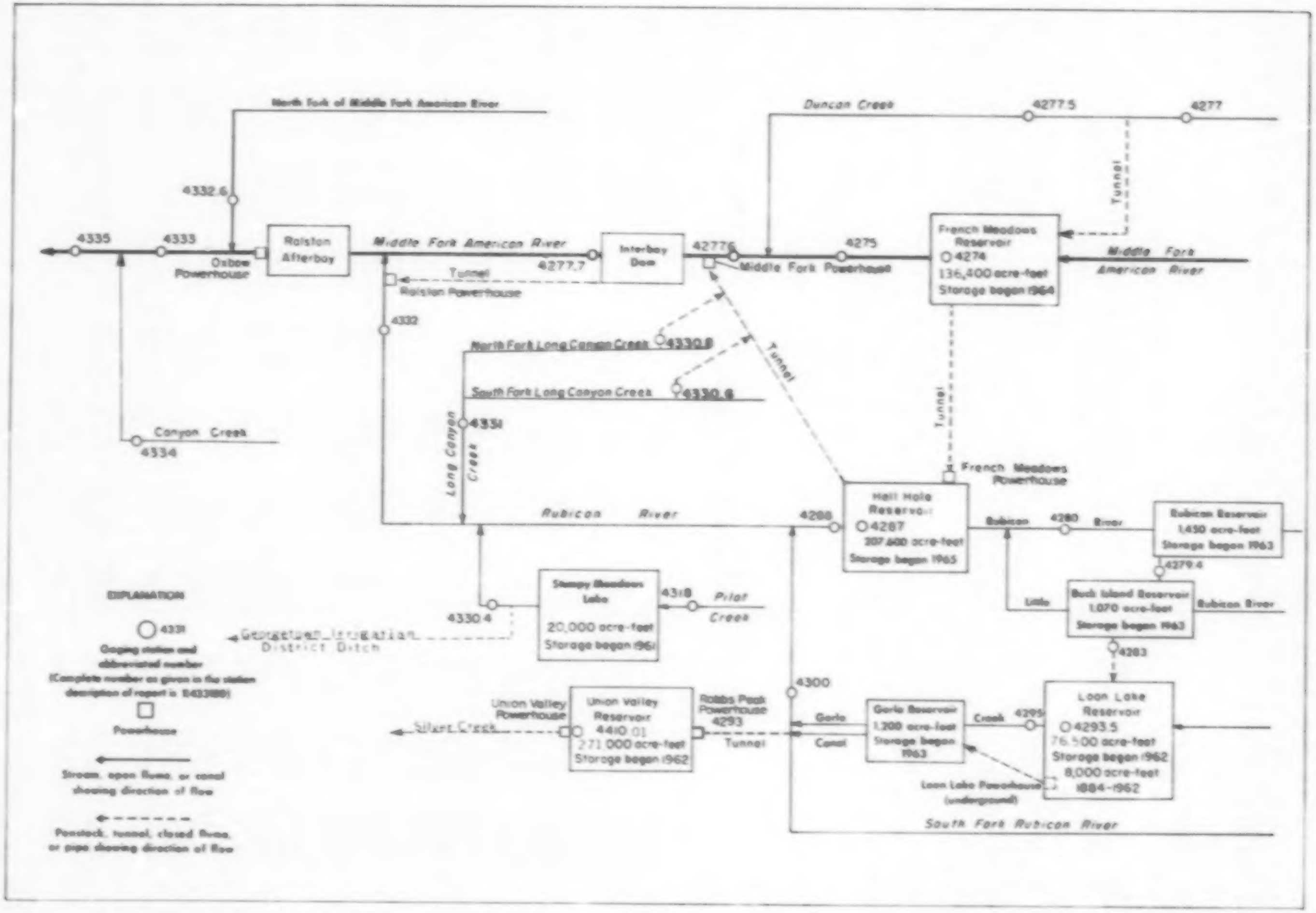

North Fork of Middle Fork American River
Duncan Creek
4277.5
4277
Tunnel
4332.6
4335
4333
Oxbow Powerhouse
Ralston Afterbay
Middle Fork American River
4277.7
Interbay Dam
4277.6
Middle Fork Powerhouse
4275
French Meadows Reservoir
4274
136,400 acre-feet
Storage began 1964
Middle Fork American River
Tunnel
Ralston Powerhouse
4332
North Fork Long Canyon Creek
4330.8
South Fork Long Canyon Creek
4330.6
Tunnel
Tunnel
Canyon Creek
4334
Long Canyon Creek
4331
French Meadows Powerhouse
Rubicon River
4288
Hell Hole Reservoir
4287
207,600 acre-feet
Storage began 1965
Rubicon
4280
River
Rubicon Reservoir
1,450 acre-feet
Storage began 1963
4279.4
Little
Buck Island Reservoir
1,070 acre-feet
Storage began 1963
Rubicon River
4283
EXPLANATION
4331
Gaging station and abbreviated number (Complete number as given in the station description of report is 11433100)
Powerhouse
Stream, open flume, or canal showing direction of flow
Penstock, tunnel, closed flume, or pipe showing direction of flow
Georgetown Irrigation District Ditch
4330.4
Stumpy Meadows Lake
20,000 acre-feet
Storage began 1961
4318
Pilot Creek
4300
Silver Creek
Union Valley Powerhouse
Union Valley Reservoir
4410.01
271,000 acre-feet
Storage began 1962
Robbs Peak Powerhouse
4293
Tunnel
Gerle
Canal
Gerle Reservoir
1,200 acre-feet
Storage began 1963
Creek
4295
Loon Lake Reservoir
4293.5
76,500 acre-feet
Storage began 1962
8,000 acre-feet
1884-1962
Loon Lake Powerhouse (underground)
South Fork Rubicon River

FIGURE 10.—Schematic diagram showing diversions and storage in Middle Fork American and Rubicon river basins.

11427400 FRENCH MEADOWS RESERVOIR NEAR FORESTHILL, CALIF.

LOCATION.--Lat 39°06'32", long 120°25'49", in SW¼NE¼ sec.32, T.15 N., R.14 E., Placer County, Tahoe National Forest, on left bank 2.2 mi (3.5 km) upstream from dam on Middle Fork American River, 6.9 mi (11.1 km) upstream from Chipmunk Creek, and 21 mi (34 km) northeast of Foresthill.

DRAINAGE AREA.--47.0 mi² (121.7 km²).

PERIOD OF RECORD.--December 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Placer County Water Agency).

EXTREMES.--Current year: Maximum contents, 136,122 acre-ft (168 hm³) July 7 (elevation, 5,262.80 ft or 1,604.101 m); minimum, 40,323 acre-ft (49.7 hm³) Apr. 8 (elevation, 5,174.30 ft or 1,577.127 m).
Period of record: Maximum contents, 137,700 acre-ft (170 hm³) May 19, 1966 (elevation, 5,263.9 ft or 1,604.44 m); minimum since reservoir first filled, 39,483 acre-ft (48.7 hm³) Mar. 15, 1973 (elevation, 5,173.20 ft or 1,576.79 m).

REMARKS.--Reservoir is formed by rockfill dam with earth core. Storage began Dec. 21, 1964. Usable capacity, 125,601 acre-ft (155 hm³) between elevations 5,125 ft (1,562.1 m), minimum operating level and 5,263 ft (1,604.2 m), top of radial gates. Dead storage, 10,804 acre-ft (13.3 hm³). Reservoir is used to store water for hydroelectric power. Up to 400 ft³/s (11.3 m³/s) is diverted in reservoir through tunnel from Duncan Creek. Water is released through tunnel to French Meadows powerplant and then into Hell Hole Reservoir on Rubicon River; releases began Dec. 13, 1965. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1966: 1965.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,125	10,804	5,200	62,447
5,130	13,075	5,230	94,074
5,150	23,743	5,270	146,502
5,170	37,085		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94538	75348	55807	51186	53778	51558	43325	47716	102954	134712	125466	110468
2	93727	74694	55115	51186	53947	51810	42880	48404	105301	134965	125233	109841
3	93081	73981	54596	51299	54044	51976	42422	49241	107600	135247	124939	109341
4	92552	73302	54168	51272	54186	51976	42037	49854	109716	135458	124416	108556
5	91807	72625	53505	51203	54257	51523	41607	50350	111982	135726	123782	108046
6	91144	71922	52794	51549	54322	51013	41117	50926	114788	135980	123179	107761
7	90450	71364	52022	51793	54391	50694	40577	51445	116854	136122	122511	107489
8	89815	70696	51436	52089	54525	50255	40323	52316	118810	135684	121899	107008
9	89105	70022	50881	52229	55061	49751	40477	53548	120520	135233	121660	106588
10	88419	69340	50754	52246	55420	49198	40677	55061	121979	134824	121447	106121
11	87702	68762	50618	52281	55510	48623	40785	56594	123581	134374	121785	105251
12	87143	68059	50694	52316	55762	48034	40939	58515	125129	133939	120177	104568
13	86343	67355	50754	52351	55870	47532	41172	60841	126687	133463	119351	104312
14	85645	66549	50823	52402	56105	46950	41482	63401	128146	133071	118875	104154
15	84917	65865	50926	52439	56231	46456	41677	65612	129492	132917	118365	103583
16	84300	65233	50874	52491	56413	46594	41896	67671	130471	132764	118038	102905
17	83609	64613	50883	52544	56594	46718	42052	70062	131039	132638	117712	102231
18	82845	64063	50926	52597	56776	46669	42233	72605	131275	132541	117491	101543
19	82519	63305	50935	52754	56740	46182	42438	75182	131524	132443	116776	101135
20	81586	62932	50952	52754	56703	45657	42611	77169	131886	132331	116219	100764
21	80896	62571	50996	52780	55942	45257	42912	78554	132220	132053	115947	100477
22	80177	62438	51090	52860	55510	44827	43364	79908	132527	130844	115135	99987
23	80003	61727	51013	52939	54453	44608	43636	81651	132889	130374	114685	99320
24	79993	61114	51013	53036	53760	44908	44414	83817	133281	129822	114633	98703
25	79929	60316	51022	53141	53062	45862	45094	86013	133491	128790	114173	98005
26	79182	59561	51030	53247	52378	45780	45520	88037	133827	128667	113456	97509
27	78543	58755	51151	53318	51715	45437	45894	90392	134051	128420	112781	97026
28	78043	58009	51160	53380	51308	44981	46297	92460	134220	127955	112235	96346
29	77274	57322	51169	53441	---	44544	46736	94887	134430	127299	111729	95924
30	76749	56585	51195	53486	---	44140	47231	97344	134515	126809	111350	95143
31	76026	---	51186	53601	---	43763	---	100190	---	126008	111097	---
MAX	94538	75348	55807	53601	56776	51976	47231	100190	134515	136122	125466	110468
MIN	76026	56585	50618	51186	51308	43763	40323	47716	102954	126008	111097	95143
(a)	5,213.61	5,193.69	5,187.60	5,190.36	5,187.74	5,178.69	5,182.94	5,235.20	5,261.66	5,255.50	5,244.10	5,230.92
(b)	-19,210	-19,441	-5,399	+2,415	-2,293	-7,952	+3,468	+52,959	+34,325	-8,507	-14,911	-15,954

CAL YR 1974 b -93
WTR YR 1975 b -10,957

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11427500 MIDDLE FORK AMERICAN RIVER AT FRENCH MEADOWS, CALIF.

LOCATION.--Lat 39°06'35", long 120°28'49", in SW¼NW¼ sec.36, T.15 N., R.13 E., Placer County, Tahoe National Forest, on left bank 0.6 mi (1.0 km) downstream from French Meadows Dam, 4.1 mi (6.6 km) upstream from Chipmunk Creek, and 14 mi (23 km) south of Cisco.

DRAINAGE AREA.--47.9 mi² (124.1 km²).

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,920 ft (1,500 m), from topographic map. Prior to Oct. 1, 1962, at site 0.8 mi (1.3 km) upstream at different datum.

AVERAGE DISCHARGE.--13 years (1951-64, prior to regulation by French Meadows Reservoir), 149 ft³/s (4.22 m³/s), 107,900 acre-ft/yr (133.0 hm³/yr); 11 years (1964-75), 24.6 ft³/s (0.697 m³/s), 17,820 acre-ft/yr (22.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 57 ft³/s (1.61 m³/s) Mar. 25 (gage height, 4.70 ft or 1.433 m); minimum daily, 5.1 ft³/s (0.14 m³/s) many days.

Period of record: Maximum discharge, 21,500 ft³/s (609 m³/s) Jan. 31, 1963 (gage height, 14.20 ft or 4.328 m), from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of maximum flow at former site; minimum, 0.3 ft³/s (0.008 m³/s) Oct. 4, 5, 21-25, 1960, Oct. 5, 6, 1961. Maximum discharge since construction of French Meadows Dam in 1964, 1,310 ft³/s (37.1 m³/s) Apr. 30, 1965 (gage height, 7.68 ft or 2.341 m); minimum daily, 0.8 ft³/s (0.023 m³/s) Oct. 22-25, 1964.

REMARKS.--Flow regulated by French Meadows Reservoir 0.6 mi (1.0 km) upstream beginning in December 1964 (see sta 11427400). Diversions from Duncan Creek to French Meadows Reservoir since December 1964 and from French Meadows Reservoir to Hell Hole Reservoir since December 1965. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1445: 1953-54. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	5.8	5.4	5.5	6.5	9.0	8.8	12	14	12	11	5.3
2	6.6	5.8	5.4	5.8	6.0	9.5	8.8	14	14	12	11	5.3
3	6.2	5.8	6.7	5.7	6.0	10	8.4	16	13	13	11	5.3
4	5.9	5.8	7.1	5.8	8.3	10	8.0	14	13	13	11	5.3
5	5.9	5.9	5.8	5.9	6.0	11	7.7	12	13	13	11	5.3
6	5.8	5.8	5.6	8.0	5.8	14	7.5	12	13	13	11	5.3
7	5.8	5.8	5.6	9.7	6.1	16	7.3	13	13	13	8.6	5.3
8	5.9	5.8	5.5	13	6.8	11	7.1	15	13	13	5.5	5.3
9	6.0	5.7	5.4	6.9	9.4	9.7	7.1	17	13	13	5.4	5.3
10	5.9	5.6	5.4	6.5	7.6	8.6	7.0	19	12	13	5.4	5.3
11	5.8	5.6	5.4	6.3	6.9	7.9	7.1	19	12	13	5.4	5.3
12	5.8	5.6	5.6	6.2	6.8	7.7	7.3	21	12	12	5.4	5.2
13	5.8	5.6	5.6	6.2	11	7.5	7.7	21	12	12	5.4	5.1
14	5.8	5.6	5.6	6.2	8.6	7.4	8.1	22	12	12	5.4	5.1
15	5.8	5.7	5.6	6.2	7.5	7.4	7.7	20	12	12	5.4	5.1
16	5.8	5.6	5.5	6.2	7.1	7.3	7.4	18	12	12	5.4	5.1
17	5.8	5.6	5.4	6.2	7.1	7.3	7.3	18	12	12	5.3	5.1
18	5.7	5.7	5.6	6.3	6.8	7.1	7.3	19	12	12	5.7	5.1
19	5.6	5.6	5.9	6.5	9.7	8.1	7.3	19	12	12	5.6	5.1
20	5.6	5.6	5.7	6.7	9.1	8.4	7.7	16	12	12	5.6	5.1
21	5.6	6.2	5.6	7.0	7.6	10	9.0	14	12	11	5.7	5.1
22	5.6	5.8	5.6	7.3	7.3	10	9.8	13	12	11	5.4	5.1
23	5.6	5.6	5.6	7.6	7.4	7.3	9.3	14	13	11	5.4	5.1
24	5.6	5.6	5.7	8.1	7.4	11	18	17	13	11	5.4	5.1
25	5.6	5.6	6.0	8.9	7.5	32	16	17	13	11	5.4	5.1
26	5.6	5.6	6.0	8.1	7.5	13	11	17	13	11	5.4	5.1
27	5.7	5.6	5.6	6.0	7.9	10	10	17	12	11	5.4	5.1
28	6.4	5.5	5.7	6.0	8.5	9.6	11	16	12	11	5.4	5.1
29	5.8	5.4	5.9	6.0	---	8.9	11	15	12	11	5.4	5.1
30	5.8	5.4	5.9	5.9	---	8.8	11	15	12	11	5.4	5.1
31	5.9	---	5.4	5.9	---	9.5	---	14	---	11	5.3	---
TOTAL	181.1	170.3	176.8	212.6	210.2	315.0	268.7	506	375	370	205.1	155.3
MEAN	5.84	5.68	5.70	6.86	7.51	10.2	8.96	16.3	12.5	11.9	6.62	5.18
MAX	6.6	6.2	7.1	13	11	32	18	22	14	13	11	5.3
MIN	5.6	5.4	5.4	5.5	5.8	7.1	7.0	12	12	11	5.3	5.1
AC-FT	359	338	351	422	417	625	533	1000	744	734	407	308
(a)	19,500	19,590	6,210	0	5,410	15,170	5,150	0	3,780	13,920	15,340	16,000

CAL YR 1974 TOTAL 7222.2 MEAN 19.8 MAX 750 MIN 5.4 AC-FT 14330
WTR YR 1975 TOTAL 3146.1 MEAN 8.62 MAX 32 MIN 5.1 AC-FT 6240

a Diversion, in acre-feet, from French Meadows Reservoir to Hell Hole Reservoir through French Meadows powerplant.

11427700 DUNCAN CREEK NEAR FRENCH MEADOWS, CALIF.

LOCATION.--Lat 39°08'09", long 120°28'39", in NE¼NW¼ sec.24, T.15 N., R.13 E., Placer County, Tahoe National Forest, on left bank 0.2 mi (0.3 km) upstream from diversion dam, 0.5 mi (0.8 km) downstream from Little Duncan Creek, 2 mi (3 km) northwest of French Meadows, and 20 mi (32 km) northeast of Foresthill.

DRAINAGE AREA.--9.94 mi² (25.74 km²).

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,270 ft (1,606 m), from topographic map. Prior to Sept. 3, 1965, at site 150 ft (46 m) upstream at datum 9.56 ft (2.914 m) higher.

AVERAGE DISCHARGE.--15 years, 37.2 ft³/s (1.054 m³/s), 26,950 acre-ft/yr (33.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 347 ft³/s (9.83 m³/s) May 31 (gage height, 7.45 ft or 2.271 m); minimum daily, 0.74 ft³/s (0.021 m³/s) Oct. 14-26.
Period of record: Maximum discharge, 3,650 ft³/s (103 m³/s) Dec. 22, 1964 (gage height, 10.6 ft or 3.23 m, from floodmarks), from rating curve extended above 400 ft³/s (11.3 m³/s) on basis of computation of flow over diversion dam; minimum daily, 0.2 ft³/s (0.006 m³/s) Sept. 23-25, 1964.

REMARKS.--No storage or diversion above station. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by the Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1965: 1963.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	2.6	2.3	2.6	12	23	29	46	300	30	3.2	1.6
2	.90	1.9	2.0	2.6	14	26	27	56	274	28	3.1	1.6
3	.90	1.7	11	2.6	12	21	26	65	252	25	2.8	1.5
4	.90	1.6	16	2.9	10	20	26	55	250	23	2.6	1.4
5	.90	1.4	6.2	3.0	7.8	21	24	48	262	22	2.5	1.3
6	.82	1.4	4.7	16	6.0	22	22	48	268	20	2.4	1.2
7	.82	1.7	4.5	30	8.6	22	20	58	240	19	2.2	1.1
8	.95	2.2	4.1	69	20	21	19	76	213	17	2.1	1.1
9	1.3	2.0	3.7	22	40	20	19	99	193	16	1.9	1.1
10	1.1	1.9	4.8	9.5	30	19	18	125	179	15	1.9	1.2
11	.97	1.9	3.4	6.3	19	17	18	143	174	13	1.8	1.2
12	.89	1.9	14	5.8	15	16	18	161	170	12	1.8	1.1
13	.80	1.8	9.1	6.3	16	16	20	187	165	11	1.7	1.0
14	.74	1.6	6.0	6.6	15	16	25	221	158	10	1.6	1.0
15	.74	1.6	5.6	6.9	13	15	22	207	144	11	1.6	.96
16	.74	1.5	5.5	6.6	12	14	20	192	127	11	1.5	.94
17	.74	1.4	4.5	7.5	12	14	18	213	107	9.5	1.5	.94
18	.74	3.1	4.6	9.2	11	13	18	253	86	8.7	5.3	.99
19	.74	2.2	3.4	11	11	14	18	255	72	7.9	8.3	.94
20	.74	1.7	3.4	11	11	14	19	209	65	7.3	4.7	.93
21	.74	8.1	3.0	11	10	13	27	156	61	6.7	10	.83
22	.74	5.4	3.2	11	9.8	15	32	149	57	6.4	4.2	.76
23	.74	3.6	3.2	11	9.8	13	31	169	53	5.8	3.1	.85
24	.74	3.4	3.2	12	11	24	48	205	55	5.4	2.6	.85
25	.74	3.9	3.2	13	12	84	54	223	53	4.9	2.4	.85
26	.74	3.2	2.8	12	13	50	42	237	47	4.4	2.2	.83
27	1.2	2.8	2.8	10	14	37	39	230	41	4.1	2.0	.76
28	7.9	2.4	3.0	11	15	32	40	237	38	3.8	2.0	.85
29	2.2	2.1	2.9	9.0	---	29	44	243	36	3.7	1.9	.85
30	1.8	2.1	2.8	8.0	---	32	48	252	33	3.5	1.8	.84
31	4.2	---	2.7	7.9	---	33	---	286	---	3.3	1.7	---
TOTAL	39.07	74.1	151.6	353.3	390.0	726	831	5112	4173	368.4	88.4	31.37
MEAN	1.26	2.47	4.89	11.4	13.9	23.4	27.7	165	139	11.9	2.85	1.05
MAX	7.9	8.1	16	69	40	84	54	286	300	30	10	1.6
MIN	.74	1.4	2.0	2.6	6.0	13	18	46	33	3.3	1.5	.76
AC-FT	77	147	301	701	774	1440	1650	10140	8280	731	175	62

CAL YR 1974 TOTAL 17143.76 MEAN 47.0 MAX 421 MIN .74 AC-FT 34000
WTR YR 1975 TOTAL 12338.24 MEAN 33.8 MAX 300 MIN .74 AC-FT 24470

Peak discharge (base, 250 ft³/s).--May 18 (1915) 318 ft³/s (7.37 ft); May 31 (1900) 347 ft³/s (7.45 ft).

11427750 DUNCAN CREEK BELOW DIVERSION DAM, NEAR FRENCH MEADOWS, CALIF.

LOCATION.--Lat 39°07'59", long 120°28'58", in NE¼SE¼ sec.23, T.15 N., R.13 E., Placer County, Tahoe National Forest, on right bank 800 ft (244 m) downstream from unnamed right bank tributary, 1,000 ft (305 m) downstream from Duncan Creek diversion dam, and 20 mi (32 km) northeast of Foresthill.

DRAINAGE AREA.--10.5 mi^2 (27.2 km^2).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,210 ft (1,588 m), from topographic map.

AVERAGE DISCHARGE.--11 years, 14.8 ft^3/s (0.419 m^3/s), 10,720 acre-ft/yr (13.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 230 ft^3/s (6.51 m^3/s) May 18 (gage height, 3.32 ft or 1.012 m); minimum daily, 0.77 ft^3/s (0.022 m^3/s) Sept. 30.

Period of record: Maximum discharge, 3,640 ft^3/s (103 m^3/s) Dec. 22, 1964 (gage height, 8.74 ft or 2.664 m in gage well, 10.0 ft or 3.05 m, from floodmarks), from rating curve extended above 400 ft^3/s (11.3 m^3/s) on basis of computation of maximum flow over diversion dam; no flow at times in 1965-66.

REMARKS.--Flow is diverted above station through Duncan Creek diversion tunnel to French Meadows Reservoir (see sta 11427400). Maximum design flow of tunnel is 400 ft^3/s (11.3 m^3/s). See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.83	2.5	1.8	2.5	10	15	15	16	128	5.5	3.0	1.9
2	.83	1.7	1.8	2.5	11	14	13	18	113	5.0	2.8	1.8
3	.89	1.4	3.9	2.5	10	14	13	19	96	4.7	2.7	1.7
4	.89	1.3	6.9	2.9	9.0	14	13	18	107	4.6	2.5	1.7
5	.96	1.2	4.8	2.8	8.1	14	14	16	133	6.8	2.5	1.6
6	.89	1.1	4.0	8.7	8.1	14	12	15	84	9.3	2.4	1.5
7	.96	1.2	3.8	14	11	14	12	17	13	9.3	2.3	1.4
8	1.0	1.8	3.6	12	12	13	12	20	13	9.3	2.3	1.4
9	1.5	1.9	3.2	9.3	16	13	12	24	12	6.8	2.2	1.4
10	1.2	1.6	3.1	8.2	13	12	12	27	12	4.5	2.1	1.4
11	1.1	1.5	3.0	7.0	12	12	12	27	12	4.2	2.0	1.5
12	1.0	1.5	4.7	6.7	12	12	12	28	12	4.1	2.0	1.4
13	1.1	1.4	5.8	7.7	11	12	12	36	12	4.0	2.0	1.3
14	1.0	1.3	4.8	8.0	12	12	13	61	12	4.0	1.9	1.2
15	1.0	1.3	4.4	8.3	12	12	12	64	11	4.0	1.9	1.1
16	1.0	1.2	4.4	8.1	12	12	12	51	11	4.0	1.8	1.1
17	.97	1.2	4.1	8.6	12	11	12	85	11	3.9	1.8	1.1
18	.96	2.5	3.5	9.4	12	11	11	146	11	3.9	3.4	1.1
19	.96	2.1	3.2	9.9	12	11	11	159	16	3.9	4.7	1.1
20	.96	1.5	3.1	10	11	11	12	107	10	3.8	4.0	1.1
21	.96	3.7	3.5	10	11	15	13	42	10	3.8	4.5	1.0
22	.96	4.2	3.2	10	11	17	14	37	10	3.8	3.8	.89
23	.96	3.2	2.5	10	11	15	14	65	9.9	3.7	3.2	.89
24	1.0	3.0	2.9	10	10	13	17	114	10	3.6	2.8	.89
25	1.0	3.3	3.0	10	11	22	18	138	9.6	3.6	2.6	.89
26	1.0	3.0	2.7	10	12	17	15	154	9.4	3.6	2.5	.83
27	1.1	2.7	2.7	9.6	12	16	14	156	8.6	3.4	2.3	.83
28	5.4	2.2	2.9	9.0	13	14	14	158	7.7	3.4	2.3	.83
29	2.2	2.0	2.7	8.8	---	14	15	85	6.8	3.3	2.2	.83
30	1.6	1.9	2.6	9.4	---	15	16	36	6.0	3.2	2.1	.77
31	3.0	---	2.5	8.8	---	16	---	77	---	3.1	2.0	---
TOTAL	39.18	60.4	109.1	254.7	317.2	427	397	2016	917.0	144.1	80.6	36.45
MEAN	1.26	2.01	3.52	8.22	11.3	13.8	13.2	65.0	30.6	4.65	2.60	1.22
MAX	5.4	4.2	6.9	14	16	22	18	159	133	9.3	4.7	1.9
MIN	.83	1.1	1.8	2.5	8.1	11	11	15	6.0	3.1	1.8	.77
AC-FT	78	120	216	505	629	847	787	4000	1820	286	160	72

CAL YR 1974 TOTAL 3218.03 MEAN 8.82 MAX 320 MIN .83 AC-FT 6380
WTR YR 1975 TOTAL 4798.73 MEAN 13.1 MAX 159 MIN .77 AC-FT 9520

11427760 MIDDLE FORK AMERICAN RIVER ABOVE MIDDLE FORK POWERHOUSE, NEAR FORESTHILL, CALIF.

LOCATION.--Lat 39°01'31", long 120°35'40", in NW¼NW¼ sec.36, T.14 N., R.12 E., Placer County, Tahoe National Forest, on right bank 300 ft (91 m) upstream from Middle Fork powerhouse, 3.7 mi (6.0 km) upstream from Big Mosquito Creek, and 11 mi (18 km) east of Foresthill.

DRAINAGE AREA.--87.8 mi² (227.4 km²).

PERIOD OF RECORD.--August 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,540 ft (774 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 105 ft³/s (2.974 m³/s), 76,070 acre-ft/yr (93.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 945 ft³/s (26.8 m³/s) Mar. 25 (gage height, 4.64 ft or 1.414 m); minimum daily, 14 ft³/s (0.40 m³/s) Oct. 7.
Period of record: Maximum discharge, 3,900 ft³/s (110 m³/s) Jan. 21, 1970 (gage height, 8.00 ft or 2.438 m); minimum daily, 12 ft³/s (0.340 m³/s) Aug. 31, 1966.

REMARKS.--Records good. Flow regulated by French Meadows Reservoir (see sta 11427400). See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1968: 1967(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	23	17	20	45	143	194	229	272	52	30	20
2	16	19	17	20	56	147	183	249	251	51	29	20
3	16	18	32	20	46	166	179	293	221	50	29	20
4	15	17	64	23	51	143	174	287	216	49	28	19
5	15	17	34	22	43	150	170	252	231	48	28	19
6	15	17	27	90	41	159	160	239	209	52	28	19
7	14	18	24	129	49	186	148	244	117	52	27	18
8	16	22	23	183	71	208	141	269	105	51	23	18
9	17	19	22	85	224	198	136	303	98	49	22	18
10	16	18	21	61	173	177	134	340	92	44	21	18
11	16	18	21	49	116	161	132	363	89	43	21	19
12	16	17	23	44	102	147	134	384	86	41	21	18
13	15	17	30	42	207	144	142	418	83	40	21	18
14	15	17	26	41	186	135	158	473	80	39	21	18
15	15	17	25	41	136	130	150	461	78	41	21	17
16	15	17	24	40	114	136	142	400	76	43	28	17
17	15	16	23	40	99	120	135	427	74	40	28	17
18	15	19	22	41	89	115	131	505	72	39	27	17
19	15	19	21	42	131	132	132	523	75	38	34	17
20	15	18	21	43	168	150	135	424	69	37	27	17
21	15	27	21	43	129	152	152	303	67	36	35	17
22	15	33	24	42	113	154	168	269	65	35	26	17
23	15	23	20	41	104	137	174	281	63	34	24	17
24	15	20	19	41	102	177	270	329	73	33	23	17
25	15	23	21	41	103	660	345	350	67	33	22	16
26	15	22	20	42	106	370	269	360	64	32	22	16
27	15	20	24	40	112	292	242	352	61	32	21	16
28	33	19	24	36	127	246	233	340	58	31	21	16
29	24	18	20	38	---	218	232	288	56	31	21	16
30	18	18	21	34	---	209	236	200	54	31	21	16
31	22	---	20	36	---	210	---	230	---	30	20	---
TOTAL	509	586	751	1510	3043	5852	5331	10385	3222	1257	794	528
MEAN	16.4	19.5	24.2	48.7	109	189	178	335	107	40.5	25.6	17.6
MAX	33	33	64	183	224	660	345	523	272	52	35	20
MIN	14	16	17	20	41	115	131	200	54	30	20	16
AC-FT	1010	1160	1490	3000	6040	11610	10570	20600	6390	2490	1580	1050

CAL YR 1974 TOTAL 47364 MEAN 130 MAX 1520 MIN 14 AC-FT 93950
WTR YR 1975 TOTAL 33720 MEAN 92.4 MAX 660 MIN 14 AC-FT 66880

11427770 MIDDLE FORK AMERICAN RIVER BELOW INTERBAY DAM, NEAR FORESTHILL, CALIF.

LOCATION.--Lat 39°01'35", long 120°36'09", in SW¼SE¼ sec.26, T.14 N., R.12 E., Placer County, Tahoe National Forest, on right bank 500 ft (152 m) downstream from Interbay Dam, 3.3 mi (5.3 km) upstream from Big Mosquito Creek, and 10.6 mi (17.1 km) east of Foresthill.

DRAINAGE AREA.--89.1 mi² (230.8 km²).

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 2,470 ft (753 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 50.6 ft³/s (1.433 m³/s), 36,660 acre-ft/yr (45.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 980 ft³/s (27.8 m³/s) Apr. 24 (gage height, 3.84 ft or 1.170 m); minimum daily, 17 ft³/s (0.48 m³/s) Dec. 10, 19-21.

Period of record: Maximum discharge, 3,770 ft³/s (107 m³/s) Jan. 21, 1970 (gage height, 6.95 ft or 2.118 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Oct. 25-30, 1966, Jan. 19, 1967.

REMARKS.--Flow regulated by French Meadows Reservoir (see sta 11427400) and after Aug. 22, 1966, by Interbay Reservoir, capacity, 130 acre-ft (160,000 m³) between normal operating limits of 2,502.0 ft (762.61 m) and 2,526.0 ft (769.92 m). Water is diverted from Hell Hole Reservoir through tunnel to Middle Fork powerplant and re-diverted to Ralston powerplant. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	19	19	18	19	18	20	20	18	18	20	19
2	20	19	19	18	19	18	20	20	18	18	19	19
3	20	19	19	18	19	18	20	19	18	19	19	19
4	20	19	19	18	19	18	20	19	18	20	20	19
5	20	19	19	18	19	18	20	19	18	19	19	19
6	20	19	19	18	19	18	103	20	18	19	20	19
7	20	19	19	18	19	18	20	19	18	20	19	20
8	20	19	18	18	19	18	20	19	18	20	19	20
9	19	19	18	18	19	18	20	18	18	19	19	20
10	19	19	17	18	19	18	20	18	18	20	19	19
11	19	21	18	18	19	18	20	18	19	19	19	21
12	19	19	18	18	19	18	20	18	19	19	19	19
13	19	19	18	18	19	18	20	18	19	19	20	19
14	19	19	18	18	19	18	20	18	18	20	20	19
15	19	19	18	18	19	18	20	18	19	19	20	19
16	19	19	18	18	19	18	20	18	18	20	20	19
17	19	19	18	18	19	19	20	18	18	19	20	19
18	19	19	18	18	19	19	20	18	19	20	20	19
19	19	19	17	18	19	19	20	18	19	19	20	19
20	19	19	17	18	19	19	20	18	19	19	20	19
21	19	19	17	18	19	22	20	18	19	20	19	19
22	19	19	18	18	19	20	20	18	18	19	19	19
23	19	19	18	18	19	20	20	18	19	19	19	19
24	19	19	18	18	18	20	33	18	18	19	20	19
25	19	19	18	18	18	20	31	18	18	19	20	19
26	19	19	18	18	18	20	20	18	18	20	20	19
27	19	19	18	18	18	20	20	18	18	20	20	19
28	19	19	18	18	18	20	20	18	18	19	19	19
29	19	19	18	18	---	20	20	18	18	19	19	19
30	19	19	18	19	---	20	20	18	18	19	19	19
31	19	---	18	19	---	20	---	18	---	19	19	---
TOTAL	597	572	561	560	527	586	707	569	549	597	604	575
MEAN	19.3	19.1	18.1	18.1	18.8	18.9	23.6	18.4	18.3	19.3	19.5	19.2
MAX	20	21	19	19	19	22	103	20	19	20	20	21
MIN	19	19	17	18	18	18	20	18	18	18	19	19
AC-FT	1180	1130	1110	1110	1050	1160	1400	1130	1090	1180	1200	1140

CAL YR 1974 TOTAL 13519 MEAN 37.0 MAX 929 MIN 18 AC-FT 26810
WTR YR 1975 TOTAL 7004 MEAN 19.2 MAX 103 MIN 17 AC-FT 13890

11427940 RUBICON-ROCKBOUND TUNNEL NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 38°59'20", long 120°13'31", in NE¼SE¼ sec.8, T.13 N., R.16 E., El Dorado County, Eldorado National Forest, on right bank at tunnel intake 100 ft (30 m) upstream from diversion dam on Rubicon River, 2.5 mi (4.0 km) upstream from Rubicon Springs, and 6.5 mi (10.5 km) southwest of Meeks Bay.

PERIOD OF RECORD.--December 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,533.23 ft (1,991.328 m) above mean sea level (levels by Sacramento Municipal Utility District). Auxiliary water-stage recorder since Aug. 26, 1966, 300 ft (91 m) downstream from tunnel outlet at different datum.

AVERAGE DISCHARGE.--12 years, 110 ft³/s (3.115 m³/s), 79,700 acre-ft/yr (98.3 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,120 ft³/s (31.7 m³/s) Dec. 23, 1964; no flow at times in most years.

REMARKS.--Records good. Tunnel diverts water from Rubicon River to Rockbound Lake. See schematic diagram of Middle Fork American and Rubicon River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	0	3.6	.55	4.7	26	34	50	864	293	27	5.9
2	3.4	0	3.4	.39	5.2	24	26	76	809	269	25	4.5
3	1.6	.75	12	.17	7.0	25	22	112	764	249	24	3.5
4	.75	3.6	48	.24	7.3	25	19	88	756	269	23	2.6
5	.47	3.8	26	.39	7.8	25	17	55	786	309	23	1.6
6	.11	3.4	17	15	7.3	22	17	52	859	326	22	1.0
7	.47	2.8	14	21	6.7	19	16	76	818	314	22	.54
8	0	4.8	12	15	9.7	17	15	126	713	279	22	.28
9	0	8.5	9.4	10	22	15	13	195	610	249	21	.14
10	0	6.9	6.3	8.1	23	14	13	263	578	222	21	.07
11	0	5.7	5.4	6.9	16	12	13	319	629	224	20	.07
12	0	5.1	9.0	6.6	13	11	13	347	721	230	19	.10
13	0	4.8	29	6.6	12	11	15	405	813	199	18	.09
14	0	4.8	17	7.3	10	11	24	559	764	166	18	.05
15	0	4.5	12	7.7	9.4	11	24	654	721	162	17	0
16	0	4.2	10	7.7	8.7	11	20	526	717	153	16	0
17	0	3.8	9.4	8.1	7.8	11	16	534	686	138	15	0
18	0	4.5	6.6	10	7.3	11	15	639	367	83	15	0
19	0	6.9	4.8	12	7.0	14	14	721	240	28	18	0
20	0	5.7	4.2	13	7.3	13	16	590	230	80	20	0
21	0	5.7	3.4	14	7.6	10	24	298	264	92	20	0
22	0	12	3.0	14	7.0	10	44	233	346	86	19	0
23	0	12	2.0	14	7.0	14	51	348	412	77	18	0
24	0	12	1.2	15	8.4	16	46	559	405	68	18	0
25	0	12	.85	17	11	50	37	682	247	68	17	0
26	0	11	.65	17	13	86	28	694	220	67	16	0
27	0	9.4	.55	14	14	54	22	716	226	62	15	0
28	0	7.3	.85	10	18	32	32	684	254	56	14	0
29	0	5.7	.85	7.7	---	25	42	695	295	50	13	0
30	0	4.2	.85	6.3	---	25	51	706	304	42	11	0
31	0	---	.65	5.1	---	35	---	813	---	34	8.9	---
TOTAL	16.20	175.85	273.95	290.84	285.2	690	739	12815	16343	4944	575.9	20.44
MEAN	.52	5.86	8.84	9.38	10.2	22.3	24.6	413	545	159	18.6	.68
MAX	9.4	12	48	21	23	86	51	813	864	326	27	5.9
MIN	0	0	.55	.17	4.7	10	13	50	220	28	8.9	0
AC-FT	32	349	543	577	566	1370	1470	25420	32420	9810	1140	41

CAL YR 1974 TOTAL 45832.65 MEAN 126 MAX 920 MIN 0 AC-FT 90910
WTR YR 1975 TOTAL 37169.38 MEAN 102 MAX 864 MIN 0 AC-FT 73730

11428000 RUBICON RIVER AT RUBICON SPRINGS, NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°01'10", long 120°14'46", in SW¼NE¼ sec.31, T.14 N., R.16 E., El Dorado County, Eldorado National Forest, on right bank 200 ft (61 m) downstream from Rubicon Springs, 0.7 mi (1.1 km) upstream from Miller Creek, and 7 mi (11 km) west of Meeks Bay.

DRAINAGE AREA.--31.4 mi² (81.3 km²).

PERIOD OF RECORD.--February 1910 to March 1914 (published as "at Rubicon Springs"), October 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,052.97 ft (1,844.945 m) above mean sea level. Feb. 1, 1910, to Mar. 31, 1914, nonrecording gage or water-stage recorder at site 0.4 mi (0.6 km) downstream at different datum.

AVERAGE DISCHARGE (adjusted for diversion to Rubicon-Rockbound tunnel).--22 years (1910-13, 1956-75), 123 ft³/s (3.483 m³/s), 89,110 acre-ft/yr (110 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 452 ft³/s (12.8 m³/s) June 6 (gage height, 4.55 ft or 1.387 m); minimum daily, 0.91 ft³/s (0.026 m³/s) Oct. 27.

Period of record: Maximum discharge, 11,500 ft³/s (326 m³/s) Feb. 1, 1963 (gage height, 14.28 ft or 4.353 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of slope-conveyance computation of maximum flow; no flow at times in some years prior to construction of Rubicon diversion dam in 1963.

Flood of December 1955 reached a stage of 13.0 ft (3.96 m), from floodmarks, present site and datum (discharge, 9,270 ft³/s or 263 m³/s).

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Low summer flow, beginning in 1950, augmented by release from streamflow maintenance dams on Lakes Clyd, Lois, Middle Velma, and Schmidell, total controlled capacity, 555 acre-ft (684,000 m³). Flow below 1,200 ft³/s (34.0 m³/s) controlled by Rubicon diversion dam 5.5 mi (8.8 km) upstream. Diversion to Rubicon-Rockbound tunnel began Dec. 26, 1963 (see sta 11427940). See schematic diagram of Middle Fork American and Rubicon River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	4.1	5.4	5.2	8.8	24	16	43	159	10	6.1	4.2
2	3.9	3.8	5.8	5.4	8.7	23	14	63	116	9.9	6.1	4.1
3	3.9	2.2	10	5.4	9.2	24	14	58	78	9.2	6.1	4.1
4	4.1	1.5	39	5.7	8.7	24	13	33	75	8.8	6.0	4.0
5	4.5	1.3	22	5.6	8.8	24	13	24	85	8.5	6.0	4.0
6	3.9	1.2	15	13	8.4	21	12	27	155	8.3	6.1	4.2
7	4.0	1.6	12	17	8.6	19	11	50	114	7.2	6.1	4.2
8	4.2	6.9	10	13	11	18	11	78	52	6.6	5.8	4.2
9	4.4	7.5	8.0	10	19	16	11	93	45	6.4	5.7	4.2
10	4.3	5.4	7.0	9.1	16	15	11	111	41	6.2	5.7	4.4
11	4.2	5.0	6.4	8.5	13	14	11	112	41	6.1	5.7	4.2
12	3.9	4.9	10	8.3	11	13	11	122	39	5.9	5.6	4.2
13	4.2	4.7	24	8.5	12	13	14	131	39	5.8	5.6	4.2
14	4.3	4.6	15	8.8	13	13	18	141	33	5.6	5.5	4.2
15	4.4	4.5	10	9.4	11	13	15	106	28	5.4	6.0	4.3
16	4.7	4.5	9.0	9.1	11	13	13	112	24	5.3	6.2	4.3
17	4.7	4.5	8.0	9.4	11	12	12	134	21	5.2	5.1	4.4
18	4.7	5.1	7.4	10	10	13	12	142	17	5.1	7.7	4.5
19	4.7	5.4	6.8	11	11	16	13	129	14	5.7	7.2	4.4
20	4.2	4.8	6.2	11	11	15	14	81	13	6.0	5.6	4.4
21	4.4	9.6	5.9	11	11	14	24	45	13	6.0	5.6	4.3
22	4.3	10	5.7	11	10	14	34	67	13	5.9	5.4	4.3
23	3.4	10	5.4	11	11	13	31	101	12	5.9	5.3	4.4
24	1.5	10	5.2	11	12	16	35	119	17	5.9	5.2	4.0
25	1.1	9.8	5.1	12	13	75	32	109	15	5.9	5.1	2.3
26	.95	9.4	5.1	12	14	31	20	110	14	5.9	4.9	1.9
27	.91	8.0	5.0	10	15	19	17	104	12	5.7	4.7	1.9
28	5.1	6.2	5.1	9.2	19	15	25	105	12	6.4	4.6	1.9
29	4.9	5.6	5.1	9.0	---	13	32	104	11	6.4	4.6	2.0
30	2.0	5.4	5.1	8.6	---	16	36	98	11	6.3	4.5	2.0
31	1.8	---	5.2	8.4	---	22	---	122	---	6.3	4.2	---
TOTAL	116.46	167.5	294.9	296.6	326.2	591	545	2874	1319	203.8	174.0	113.7
MEAN	3.76	5.58	9.51	9.57	11.7	19.1	18.2	92.7	44.0	6.57	5.61	3.79
MAX	5.1	10	39	17	19	75	36	142	159	10	7.7	4.5
MIN	.91	1.2	5.0	5.2	8.4	12	11	24	11	5.1	4.2	1.9
AC-FT	231	332	585	588	647	1170	1080	5700	2620	404	345	226
MEAN a	4.28	11.4	18.4	18.9	21.8	41.3	42.9	506	606	170	25.0	5.43
AC-FT a	263	681	1,130	1,160	1,210	2,540	2,550	31,120	36,030	10,470	1,540	323

CAL YR 1974 TOTAL 8334.86 MEAN 22.8 MAX 1190 MIN .91 AC-FT 16530 MEAN a 148 AC-FT a 107,400
WTR YR 1975 TOTAL 7022.16 MEAN 19.2 MAX 159 MIN .91 AC-FT 13930 MEAN a 123 AC-FT a 89,010

a Adjusted for diversion to Rubicon-Rockbound tunnel.

NOTE.--No gage-height record Nov. 22 to Jan. 3.

11428300 BUCK-LOON TUNNEL NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°00'15", long 120°15'20", in SE¼NW¼ sec.6, T.13 N., R.16 E., El Dorado County, Eldorado National Forest, on right bank at tunnel intake near left abutment of diversion dam, 7.6 mi (12.2 km) southwest of Meeks Bay.

PERIOD OF RECORD.--November 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,425.0 ft (1,958.34 m) above mean sea level (levels by Sacramento Municipal Utility District).

AVERAGE DISCHARGE.--12 years, 140 ft³/s (3.965 m³/s), 101,400 acre-ft/yr (125 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,240 ft³/s (35.1 m³/s) Dec. 23, 1964; no flow many days in most years.

REMARKS.--Records good. Tunnel diverts water from Buck Island Lake and discharges into Loon Lake. Gates are closed in the tunnel entrance during the summer and opened each fall to raise the level of Buck Island Lake for recreation purposes. See schematic diagram of Middle Fork American and Rubicon River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	0	6.1	1.5	15	31	48	71	1140	370	30	9.4
2	5.6	0	5.0	1.2	24	38	42	92	1110	343	26	9.0
3	3.0	0	12	1.1	20	40	36	137	1090	316	24	8.6
4	2.4	0	54	1.4	21	37	34	122	1080	321	22	8.1
5	2.3	.71	52	1.6	18	38	35	79	1090	362	22	7.6
6	1.4	1.6	35	5.8	14	38	31	60	1140	384	22	7.0
7	1.0	2.7	25	18	13	36	28	71	1120	389	23	6.5
8	.78	5.0	20	32	17	38	25	121	1060	350	24	5.8
9	.64	6.6	15	28	37	31	23	207	899	313	23	5.7
10	.46	7.6	12	19	48	26	22	296	815	268	22	4.5
11	.36	7.6	10	15	35	23	23	391	829	266	22	3.9
12	.17	7.4	12	12	26	20	21	436	953	282	21	3.2
13	0	6.8	33	11	27	19	22	496	1080	258	20	2.6
14	0	6.4	36	11	24	21	30	655	1070	213	18	2.0
15	0	6.1	26	11	19	19	39	837	1020	205	17	1.8
16	0	5.6	19	11	16	24	36	717	991	188	16	1.7
17	0	5.2	16	11	15	21	30	687	999	173	15	1.6
18	0	5.4	13	12	13	19	26	815	590	96	18	1.4
19	0	7.4	11	13	15	21	24	948	362	7.5	25	1.3
20	0	7.6	8.5	16	17	24	25	879	311	30	26	1.2
21	0	9.7	6.8	19	15	24	31	448	328	83	24	1.0
22	0	15	6.1	19	13	29	48	287	401	92	22	.92
23	0	16	5.0	19	12	23	63	394	481	84	20	.88
24	0	15	3.4	19	12	26	73	668	531	75	18	.70
25	0	16	2.6	21	15	65	68	879	365	70	17	.61
26	0	16	2.1	26	18	110	50	910	291	68	16	.54
27	0	13	2.4	27	20	92	40	956	282	66	14	.50
28	0	11	4.0	22	23	56	41	924	309	60	13	.49
29	0	9.1	3.2	17	---	42	51	934	351	53	12	.44
30	0	7.4	2.4	14	---	36	64	945	376	46	11	.40
31	0	---	2.0	11	---	42	---	1060	---	38	9.9	---
TOTAL	43.11	217.91	460.6	446.6	562	1109	1129	16522	22374	5869.5	612.9	99.30
MEAN	1.39	7.26	14.9	14.4	20.1	35.8	37.6	533	746	189	19.8	3.31
MAX	25	16	54	32	48	110	73	1060	1140	389	30	9.4
MIN	0	0	2.0	1.1	12	19	21	60	282	7.5	9.9	.40
AC-FT	86	432	914	886	1110	2200	2240	32770	44380	11640	1220	197

CAL YR 1974 TOTAL 59211.07 MEAN 162 MAX 1130 MIN 0 AC-FT 117400
WTR YR 1975 TOTAL 49445.92 MEAN 135 MAX 1140 MIN 0 AC-FT 98080

11428700 HELL HOLE RESERVOIR NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°03'54", long 120°24'50", in SE¼NW¼ sec.16, T.14 N., R.14 E., Placer County, Eldorado National Forest, on right bank 0.3 mi (0.5 km) upstream from Hell Hole Dam on Rubicon River, and 15.6 mi (25.1 km) west of Meeks Bay.

DRAINAGE AREA.--114 mi² (295 km²).

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Placer County Water Agency).

EXTREMES.--Current year: Maximum contents, 205,600 acre-ft (254 hm³), estimated, July 7; minimum, 94,609 acre-ft (117 hm³) Apr. 23 (elevation, 4,515.37 ft or 1,376.285 m).
Period of record: Maximum contents, 209,500 acre-ft (258 hm³) June 17, 1967 (elevation, 4,631.5 ft or 1,411.68 m); minimum since reservoir first filled, 37,499 acre-ft (46.2 hm³) Mar. 23, 1973 (elevation, 4,428.28 ft or 1,349.740 m).

REMARKS.--Reservoir is formed by rockfill dam with earth core. Storage began Dec. 6, 1965. Usable capacity, 207,342 acre-ft (256 hm³) between elevations 4,287.65 ft (1,306.876 m), invert of river outlet and 4,630.0 ft (1,411.22 m), crest of ogee spillway, above mean sea level. Dead storage, 248 acre-ft (306,000 m³). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,340	5,220	4,500	83,025
4,360	9,835	4,550	122,720
4,380	16,250	4,600	171,865
4,400	24,160	4,650	233,420
4,450	49,610		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156848	127009	103847	104799	99530	102263	104855	96412	175577	203200	198797	181825
2	155594	126521	103289	104615	99806	102795	104407	96824	177086	203400	198039	181243
3	154400	126225	103624	104399	99672	102589	103847	98174	177775	203600	197160	180778
4	153122	125012	104295	104039	99805	102589	103448	99090	178695	203800	196357	180047
5	152764	123798	104239	103528	99192	102533	103289	99538	184637	204300	196394	178661
6	152447	122635	103879	104119	99145	102461	103719	99931	188303	204900	196114	177465
7	151255	121465	104511	104455	98675	103512	103225	101035	190449	205600	195507	176491
8	150122	120321	105015	104903	98737	104647	102620	102358	191767	205500	195071	175611
9	149007	120444	105216	104759	99145	105754	101827	104135	192849	205400	194563	174406
10	147760	120568	105394	104455	100072	105883	101272	106462	193934	205310	193934	173670
11	146513	119488	105336	104271	100151	106020	100325	108972	194781	205200	193210	173045
12	146246	118307	105545	104071	99884	105762	99774	111752	195993	205067	192849	172142
13	145981	117122	105657	103895	100325	105657	99224	115057	197575	205055	192560	170899
14	144805	115931	105802	103416	100616	105818	98518	118317	198479	204657	192248	169739
15	143591	114692	105899	102636	100798	105762	98002	121902	199213	204470	191659	169226
16	142673	114393	105867	102001	100822	105007	97502	124908	199925	203937	190964	168349
17	141522	114094	105931	101589	100601	104375	96412	128561	200884	203775	190114	167785
18	140257	113020	105818	101684	100325	103576	95796	132670	200490	203477	189732	166914
19	139812	111998	105826	101787	100529	103799	95312	136770	200392	204222	189374	166199
20	139652	110800	105834	101621	100372	103847	95343	140950	199875	203230	189017	165049
21	138514	109477	105842	101383	100460	103847	95041	141570	200133	202611	188779	163633
22	137293	108006	105850	101288	100861	103656	94802	144479	200600	202116	188065	162549
23	135598	107625	105812	100845	101161	102930	94609	147462	201228	202816	187709	161525
24	133700	107617	105802	100711	101161	102223	95374	149468	201796	203477	186500	160344
25	132166	106736	105794	100664	101233	104327	96016	152951	202104	201623	185898	159160
26	131361	105681	105786	100585	101453	104719	96607	156564	202339	200786	185815	157742
27	131182	104615	105722	100317	101668	104711	97120	159540	202549	200318	185343	156324
28	131093	104495	105360	100010	101843	104447	96933	162241	202833	199630	184990	155116
29	130559	104191	105312	99907	---	104159	96745	165213	202980	199569	184637	153760
30	129407	104159	105200	99711	---	104567	96560	167741	203106	199287	183579	152508
31	128182	---	104935	99459	---	104751	---	171595	---	199042	182526	---
MAX	156848	127009	105931	104903	101843	106020	104855	171595	203106	205600	198797	181825
MIN	128182	104159	103289	99459	98675	102223	94609	96412	175577	199042	182526	152508
(a)	4,556.31	4,527.53	4,528.50	4,521.60	4,524.62	4,528.27	4,517.89	4,599.76	4,626.40	4,623.10	4,609.30	4,582.01
(b)	-29,824	-24,023	+776	-5,476	+2,384	+2,908	-8,191	+75,035	+31,511	-4,064	-16,516	-30,018

CAL YR 1974 b -5,498
WTR YR 1975 b-37,719

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
NOTE.--No elevation record July 1-11.

11428800 RUBICON RIVER BELOW HELL HOLE DAM, NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°03'24", long 120°24'25", in NE¼NE¼ sec.21, T.14 N., R.14 E., Placer County, Eldorado National Forest, on right bank 600 ft (183 m) downstream from outlet of dam, and 15.3 mi (24.6 km) west of Meeks Bay.

DRAINAGE AREA.--114 mi² (295 km²).

PERIOD OF RECORD.--November 1965 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 4,231.52 ft (1,289.767 m) above mean sea level (levels by Placer County Water Agency).

AVERAGE DISCHARGE.--9 years, 26.7 ft³/s (0.756 m³/s), 19,340 acre-ft/yr (23.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 54 ft³/s (1.53 m³/s) Mar. 25 (gage height, 4.51 ft or 1.375 m); minimum daily, 5.9 ft³/s (0.167 m³/s) Sept. 14-18.

Period of record: Maximum discharge, 2,290 ft³/s (64.8 m³/s) June 18, 1967, including flow over spillway; no flow Aug. 25 to Sept. 11, 1966.

REMARKS.--Flow regulated by Hell Hole Reservoir beginning December 1965 (see sta 11428700). Water is diverted out of the basin above the station through Buck-Loon tunnel (see sta 11428300). Water is diverted from Middle Fork American River basin by tunnel from French Meadows Reservoir (see sta 11427400) to Hell Hole Reservoir. Water is diverted from Hell Hole Reservoir through a tunnel to Middle Fork powerplant. Diversion began Sept. 8, 1966. During years when Hell Hole Dam spills, records include flow which bypasses the station. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	13	13	13	17	20	20	20	17	17	14	7.5
2	8.2	13	13	13	17	20	19	20	16	17	14	7.5
3	8.2	12	15	13	17	19	19	22	16	17	14	7.1
4	7.9	12	15	13	17	19	19	21	16	17	14	7.1
5	7.9	12	14	13	17	19	19	20	16	17	14	6.8
6	8.1	12	13	18	17	20	19	20	15	17	11	6.8
7	8.4	12	13	16	18	21	19	20	14	17	9.1	6.8
8	8.2	11	13	18	19	22	19	21	14	17	9.0	6.8
9	8.2	11	13	14	24	20	19	23	14	17	8.9	6.8
10	8.2	11	13	14	19	19	19	24	13	17	8.9	6.8
11	8.2	11	13	13	18	19	19	25	13	17	8.9	6.8
12	8.5	11	13	13	18	19	20	27	13	17	8.9	6.2
13	8.5	11	13	13	24	19	20	29	17	17	8.9	6.2
14	8.5	11	13	13	20	19	19	31	20	17	8.9	5.9
15	8.5	11	13	13	19	19	19	30	20	17	8.9	5.9
16	8.5	11	13	13	18	19	19	29	19	17	8.9	5.9
17	8.5	11	13	13	18	19	18	31	19	17	8.9	5.9
18	8.5	11	13	13	18	18	18	33	19	17	8.9	5.9
19	8.5	11	13	13	20	20	18	27	19	17	8.9	6.8
20	8.5	11	13	13	20	20	19	17	19	17	8.9	7.8
21	8.2	11	13	13	18	19	19	15	19	17	8.9	7.8
22	8.2	12	13	13	18	19	19	14	18	17	8.5	7.8
23	8.2	12	13	13	18	18	19	14	18	17	8.2	7.8
24	8.2	12	13	13	19	22	24	16	18	17	8.2	7.8
25	8.2	13	13	13	19	33	22	16	18	16	7.5	7.8
26	7.9	13	13	13	19	21	20	17	18	14	7.5	7.8
27	7.5	12	13	13	20	20	19	16	18	14	7.5	7.8
28	7.9	13	13	13	20	20	19	16	18	14	7.1	7.8
29	7.6	13	13	13	---	20	20	16	17	14	7.8	7.5
30	9.3	13	13	13	---	20	20	17	17	14	7.5	7.5
31	13	---	13	15	---	20	---	17	---	14	7.5	---
TOTAL	260.4	353	408	420	526	622	581	664	508	508	292.1	210.7
MEAN	8.40	11.8	13.2	13.5	18.8	20.1	19.4	21.4	16.9	16.4	9.42	7.02
MAX	13	13	15	18	24	33	24	33	20	17	14	7.8
MIN	7.5	11	13	13	17	18	18	14	13	14	7.1	5.9
AC-FT	517	700	809	833	1040	1230	1150	1320	1010	1010	579	418
(a)	47,300	42,560	7,360	9,890	10,900	28,710	28,090	6,530	40,400	27,380	32,190	45,120

CAL YR 1974 TOTAL 6469.3 MEAN 17.7 MAX 731 MIN 5.8 AC-FT 12830
WTR YR 1975 TOTAL 5353.2 MEAN 14.7 MAX 33 MIN 5.9 AC-FT 10620

a Diversion, in acre-feet, from Hell Hole Reservoir to Middle Fork powerplant.

11429300 ROBBS PEAK POWERPLANT NEAR KYBURZ, CALIF.

LOCATION.--Lat 38°53'46", long 120°22'40", in SE¼SW¼ sec.11, T.12 N., R.14 E., El Dorado County, Eldorado National Forest, in powerhouse on shore of Union Valley Reservoir, 9.5 mi (15.3 km) northwest of Kyburz.

PERIOD OF RECORD.--October 1962 to current year. Prior to October 1965, published as Robbs Peak tunnel near Riverton.

GAGE.--Discharge computed from powerplant output. Altitude of gage is 4,880 ft (1,487 m), from topographic map. Prior to October 1965, water-stage recorder and concrete control in abandoned section of canal 0.5 mi (0.8 km) upstream at different datum.

AVERAGE DISCHARGE.--13 years, 248 ft³/s (7.023 m³/s), 179,700 acre-ft/yr (222 km³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,440 ft³/s (40.8 m³/s) Dec. 22-24, 1964; no flow many days during 1965-75.

REMARKS.--Tunnel diverts at South Fork Rubicon River diversion dam in NE¼ sec.27, T.13 N., R.14 E., and discharges into Union Valley Reservoir (see sta 11441001). Water is imported from Rubicon River basin via Rubicon-Rockbound tunnel and Buck-Loon tunnel to Loon Lake, then via Loon Lake powerplant or Gerle Creek to Robbs Peak tunnel and powerplant. The water is later used in the South Fork American River basin for power development. See schematic diagrams of Middle Fork American and Rubicon River basins and South Fork American River basin.

COOPERATION.--Records furnished by Sacramento Municipal Utility District, rounded to Geological Survey standards.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	21	0	388	509	580	317	789	154	178	442
2	21	0	0	0	79	214	623	373	829	53	12	423
3	1.0	0	95	41	425	233	566	424	719	80	0	443
4	0	0	102	18	466	284	647	332	872	86	43	481
5	0	0	0	0	447	280	610	287	899	47	0	448
6	0	33	49	83	465	420	227	209	967	64	0	393
7	0	0	0	172	495	419	473	533	934	60	12	415
8	4.0	0	14	140	520	442	685	687	915	50	58	394
9	12	0	75	63	188	189	582	708	983	138	0	398
10	5.0	0	0	53	395	330	556	807	980	267	0	423
11	0	0	0	60	475	350	658	792	982	301	49	421
12	35	67	64	47	413	127	594	841	919	246	0	421
13	0	0	50	60	445	447	254	938	922	5.0	0	388
14	0	0	42	71	452	382	528	947	585	163	0	403
15	0	0	0	80	464	379	590	886	718	232	0	131
16	0	0	69	33	96	140	601	808	721	198	0	0
17	4.0	0	0	53	76	294	594	925	659	170	0	0
18	7.0	0	79	69	420	473	590	952	602	67	274	0
19	0	0	37	67	517	398	547	937	569	94	319	0
20	0	34	0	24	480	408	221	838	573	67	341	0
21	0	0	0	70	446	418	532	879	607	33	334	0
22	0	48	36	151	432	333	678	951	562	27	406	0
23	49	0	0	80	108	172	650	951	517	14	415	0
24	0	0	58	12	440	311	708	914	541	26	420	0
25	0	0	0	98	471	609	662	897	349	49	370	0
26	0	25	0	74	469	671	504	942	310	0	518	0
27	0	0	54	61	479	716	571	881	292	0	395	0
28	0	0	0	35	518	470	601	858	274	0	407	0
29	0	0	0	60	---	605	697	796	149	0	401	3.0
30	0	33	0	37	---	202	699	906	197	0	397	3.0
31	0	---	61	43	---	582	---	894	---	0	416	---
TOTAL	138.0	240	906	1855	11069	11807	16948	23330	19855	2691.0	5765	6030.0
MEAN	4.45	8.00	29.2	59.8	395	381	565	753	662	86.8	186	201
MAX	49	67	102	172	520	716	708	952	983	301	518	481
MIN	0	0	0	0	76	127	221	207	149	0	0	0
AC-FT	274	476	1800	3680	21960	23420	33620	46280	39380	5340	11430	11960

CAL YR 1974 TOTAL 107843.00 MEAN 295 MAX 940 MIN 0 AC-FT 213900
WTR YR 1975 TOTAL 100634.00 MEAN 276 MAX 983 MIN 0 AC-FT 199600

11429350 LOON LAKE NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°00'17", long 120°18'30", in SW¼NW¼ sec.4, T.13 N., R.15 E., El Dorado County, Eldorado National Forest, on right bank at Loon Lake Dam on Gerle Creek, 2.3 mi (3.7 km) upstream from Jerrett Creek, and 11 mi (18 km) southwest of town of Meeks Bay.

DRAINAGE AREA.--7.94 mi^2 (20.6 km^2).

PERIOD OF RECORD.--December 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Sacramento Municipal Utility District).

EXTREMES.--Current year: Maximum contents, 75,900 acre-ft (93.6 hm^3) July 31 (elevation, 6,409.8 ft or 1,953.70 m); minimum, 9,400 acre-ft (11.6 hm^3) Apr. 30 (elevation, 6,344.7 ft or 1,933.86 m).

Period of record: Maximum contents, 77,700 acre-ft (95.8 hm^3) June 6, 1969 (elevation, 6,411.1 ft or 1,954.10 m); minimum since reservoir first filled, 3,690 acre-ft (4.55 hm^3) Nov. 3, 1970 (elevation, 6,330.3 ft or 1,929.48 m).

REMARKS.--Reservoir is formed by an earthfill dam completed Dec. 27, 1963. Storage began Dec. 5, 1963. Usable capacity, 74,100 acre-ft (91.4 hm^3) between elevations 6,325 ft (1,927.9 m), invert of fishwater release valve and 6,410 ft (1,953.8 m), crest of spillway, above mean sea level. Dead storage, 2,360 acre-ft (2.91 hm^3). Prior to September 1962, reservoir was formed by granite-block dam built in 1884, capacity, 8,000 acre-ft (9.86 hm^3). Lake receives water from Rubicon River via Rubicon-Rockbound tunnel to Buck Island Lake and from Buck Island Lake to Loon Lake via Buck-Loon tunnel (see sta 11427940, 11428300). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Middle Fork American and Rubicon River basins.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

6,330	3,600
6,340	7,200
6,350	12,500
6,360	19,600
6,370	28,500
6,390	50,000
6,412	79,000

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60900	59500	59600	60500	60900	44200	32200	9700	48600	68800	75600	63700
2	60700	59500	59600	60500	61200	44400	31400	10000	50500	69500	75600	62800
3	60700	59500	59900	60500	60400	44200	30600	10700	52500	70200	75600	61900
4	60500	59500	60000	60500	59800	44000	29600	11100	54300	70900	75600	61000
5	60500	59500	60100	60500	59000	43800	28600	11400	55800	71600	75600	60100
6	60400	59400	60300	60800	58100	43400	28700	11500	57300	72400	75600	59200
7	60400	59400	60300	60900	57300	43000	27600	11400	58600	73100	75600	58300
8	60400	59400	60300	61200	56400	42600	26500	11200	59400	74000	75600	57500
9	60300	59400	60300	61200	56900	42700	25500	11800	59900	74000	75600	56700
10	60300	59500	60300	61300	56400	42200	24400	12700	60100	74100	75600	55800
11	60100	59500	60300	61300	55800	41600	23200	13900	60400	74100	75400	54900
12	60100	59500	60400	61300	55200	41600	22300	15000	61000	74200	75400	54200
13	60100	59500	60400	61400	54700	40900	22400	16500	61900	74700	75400	53300
14	60100	59500	60500	61400	53900	40300	21400	18500	63400	74800	75400	52300
15	59900	59500	60500	61300	53200	39800	20400	20700	64400	74700	75400	52300
16	59900	59400	60700	61300	53200	39900	19400	22500	65200	74800	75400	52300
17	59900	59400	60700	61400	53300	39400	18600	24400	65800	74800	75200	52300
18	59900	59400	60700	61300	52500	38700	17400	26500	66100	74900	74700	52300
19	59800	59400	60700	61400	51600	38300	16400	28800	66000	74700	74100	52300
20	59800	59400	60700	61400	50800	37600	16500	30400	65800	74700	73500	52100
21	59800	59500	60500	61400	49900	37200	15400	30600	65600	74900	73000	52100
22	59600	59500	60500	61300	49200	36800	14700	30500	65400	75100	72100	52100
23	59600	59600	60500	61300	49200	36900	14100	31100	65600	75200	71300	52100
24	59600	59600	60500	61400	48200	36500	13600	32500	65800	75400	70600	52100
25	59600	59600	60500	61400	47400	36500	13300	34500	66300	75500	69800	52000
26	59500	59800	60500	61400	46600	36000	12700	36300	66600	75600	68700	52000
27	59500	59600	60700	61400	45800	35000	11800	38200	66700	75600	67900	52000
28	59500	59600	60500	61400	45000	34600	11000	40000	67000	75800	67100	51900
29	59500	59600	60500	61400	---	33700	10000	42100	67600	75800	66300	51900
30	59500	59600	60500	61400	---	33800	9400	43800	68000	75800	65400	51900
31	59500	---	60500	61400	---	33000	---	46000	---	75900	64500	---
MAX	60900	59800	60700	61400	61200	44400	32200	46000	68000	75900	75600	63700
MIN	59500	59400	59600	60500	45000	33000	9400	9700	48600	68800	64500	51900
(a)	6,397.5	6,397.6	6,398.3	6,399.0	6,385.8	6,374.7	6,344.7	6,386.7	6,404.1	6,409.8	6,401.4	6,391.5
(b)	-1,400	+100	+900	+900	-16,400	-12,000	-23,600	+36,600	+22,000	+7,900	-11,400	-12,600

CAL YR 1974 b +2,500
WTR YR 1975 b -9,000

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11429500 GERLE CREEK BELOW LOON LAKE DAM, NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°00'20", long 120°18'52", in NE¼NE¼ sec.5, T.13 N., R.15 E., El Dorado County, Eldorado National Forest, on right bank 0.3 mi (0.5 km) downstream from Loon Lake Dam, and 11 mi (18 km) southwest of Meeks Bay.

DRAINAGE AREA.--8.01 mi² (20.7 km²).

PERIOD OF RECORD.--July 1910 to April 1914 (fragmentary), August 1962 to current year. Prior to August 1962, published as "near Rubicon Springs."

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 6,250 ft (1,905 m), from topographic map. Prior to August 1962, nonrecording gage at site 1,400 ft (427 m) upstream at different datum.

AVERAGE DISCHARGE.--9 years (1911, 1962-70, prior to diversion to Loon Lake powerplant), 132 ft³/s (3.738 m³/s), 95,630 acre-ft/yr (118 hm³/yr); 5 years (1971-75), 24.7 ft³/s (0.700 m³/s), 17,900 acre-ft/yr (22.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13 ft³/s (0.37 m³/s) May 18 (gage height, 2.10 ft or 0.640 m); minimum daily, 5.2 ft³/s (0.15 m³/s) May 5, 6.

Period of record: Maximum discharge, 3,240 ft³/s (91.8 m³/s), unregulated, Feb. 1, 1963 (gage height, 12.65 ft or 3.856 m), from rating curve extended above 600 ft³/s (17.0 m³/s) on basis of slope-area measurement of maximum flow; no flow Oct. 15, 1913. Maximum discharge since construction of Loon Lake Dam in 1963, 1,050 ft³/s (29.7 m³/s) June 5, 1969 (gage height, 9.03 ft or 2.752 m); minimum daily, 5.2 ft³/s (0.15 m³/s) May 5, 6, 1975.

REMARKS.--Records excellent. Beginning in 1884, flow regulated by Loon Lake (see sta 11429350). Original dam was dismantled during September and October 1962 to permit construction of a new earthfill dam which was completed Dec. 27, 1963. Storage began Dec. 5, 1963. Loon Lake receives water from Rubicon River via Rubicon-Rockbound tunnel to Buck Island Lake and from Buck Island Lake to Loon Lake via Buck-Loon tunnel (see sta 11427940, 11428300). Diversion to Loon Lake powerplant starting August 1971, bypasses station and returns to Gerle Creek at Gerle Creek Dam. See schematic diagram of Middle Fork American and Rubicon River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	6.9	7.1	8.5	8.2	7.7	7.4	5.7	11	10	9.0	8.7
2	10	6.9	6.9	8.5	8.2	7.7	7.4	5.7	10	10	9.0	8.7
3	10	7.4	7.4	8.5	8.2	7.7	7.7	5.7	10	10	8.9	8.7
4	10	8.2	6.9	8.5	8.2	7.7	7.7	5.5	12	10	8.9	8.7
5	9.9	8.8	7.1	8.5	8.2	7.7	7.7	5.3	12	10	8.9	8.7
6	9.9	9.3	7.7	9.0	8.2	7.7	7.7	5.3	12	10	9.1	9.0
7	9.9	9.6	8.5	9.0	8.2	7.7	7.7	5.5	11	10	8.9	9.0
8	7.9	9.6	8.5	9.0	8.5	7.7	7.7	5.9	11	10	8.7	9.0
9	7.9	9.6	8.8	8.8	9.0	7.7	7.4	6.4	11	10	8.7	8.5
10	8.2	9.6	8.8	8.5	8.5	7.7	7.4	6.9	10	10	8.7	7.9
11	8.5	9.3	8.8	8.5	8.2	7.7	7.1	7.4	10	10	8.8	8.2
12	8.2	9.0	12	8.5	8.2	7.7	7.1	7.9	10	10	9.0	7.9
13	8.8	8.5	8.8	8.5	8.2	7.7	6.9	8.8	9.9	10	9.0	7.9
14	9.0	7.9	8.8	8.5	7.9	7.7	7.9	9.0	9.9	10	9.0	7.9
15	9.0	7.7	8.8	8.5	7.9	7.7	6.9	9.0	9.9	10	9.0	7.6
16	9.0	7.4	8.8	8.5	7.9	7.9	6.9	9.3	9.9	10	9.0	7.6
17	9.0	6.9	8.8	8.5	7.9	7.9	6.6	10	9.9	10	8.9	7.6
18	9.0	6.9	8.8	8.5	7.7	7.9	6.4	11	9.9	10	8.8	7.6
19	9.0	6.9	9.0	8.5	7.7	7.9	6.4	11	9.9	10	9.0	7.6
20	9.0	7.1	9.0	8.5	7.9	7.9	6.2	9.9	9.9	10	8.7	7.9
21	9.0	8.5	9.0	8.5	7.9	8.5	6.4	9.6	9.9	9.9	8.7	7.9
22	8.8	8.8	9.0	8.5	7.7	7.9	6.4	9.9	9.9	8.8	8.7	7.9
23	8.8	9.0	8.8	8.5	7.7	7.9	6.4	10	9.9	8.8	8.7	8.2
24	8.5	9.3	8.8	8.5	7.7	8.2	6.4	11	10	8.8	8.5	8.2
25	8.5	9.3	8.5	8.5	7.7	8.8	6.4	11	10	8.8	8.7	8.2
26	7.9	9.3	8.5	8.2	7.9	7.9	6.4	11	10	9.0	8.7	8.2
27	7.7	9.0	8.5	8.2	7.9	7.7	6.2	11	9.9	9.0	8.7	8.2
28	7.4	8.5	8.5	8.2	7.9	7.7	5.7	11	10	9.0	8.7	8.2
29	6.9	7.9	8.5	8.2	---	7.7	5.7	12	10	10	8.9	8.2
30	6.6	7.4	8.5	8.2	---	7.7	5.7	11	10	9.6	9.0	8.2
31	6.6	---	8.5	8.2	---	7.7	---	11	---	9.0	8.8	---
TOTAL	268.9	250.5	264.4	263.5	225.3	242.7	205.9	269.7	308.8	300.7	274.1	246.1
MEAN	8.67	8.35	8.53	8.50	8.05	7.83	6.86	8.70	10.3	9.70	8.84	8.20
MAX	10	9.6	12	9.0	9.0	8.8	7.9	12	12	10	9.1	9.0
MIN	6.6	6.9	6.9	8.2	7.7	7.7	5.7	5.3	9.9	8.8	8.5	7.6
AC-FT	533	497	524	523	447	481	408	535	613	596	544	488
(a)	539	18	164	324	19,136	15,536	24,792	7,212	24,556	4,045	12,152	12,287

CAL YR 1974 TOTAL 3426.3 MEAN 9.39 MAX 17 MIN 6.6 AC-FT 6800
WTR YR 1975 TOTAL 3120.6 MEAN 8.55 MAX 12 MIN 5.3 AC-FT 6190

a Diversion, in acre-feet, to Loon Lake powerplant, furnished by Sacramento Municipal Utility District.

11430000 SOUTH FORK RUBICON RIVER BELOW GERLE CREEK, NEAR GEORGETOWN, CALIF.

LOCATION.--Lat 38°57'17", long 120°24'02", in SW¼SW¼ sec.22, T.13 N., R.14 E., El Dorado County, Eldorado National Forest, on left bank 600 ft (183 m) downstream from Gerle Creek, and 18 mi (29 km) east of Georgetown.

DRAINAGE AREA.--47.6 mi² (123 km²).

PERIOD OF RECORD.--February 1910 to June 1914 (published as Little South Fork Rubicon River below Gerle Creek near Quintette), August 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,970 ft (1,515 m), from topographic map. Feb. 1, 1910, to June 21, 1914, nonrecording gage at site about 700 ft (213 m) downstream at different datum.

AVERAGE DISCHARGE (unadjusted).--13 years (1962-75), 22.3 ft³/s (0.632 m³/s), 16,160 acre-ft/yr (19.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 284 ft³/s (8.04 m³/s) May 19 (gage height, 4.15 ft or 1.265 m); minimum daily, 5.3 ft³/s (0.15 m³/s) Jan. 2, 3.

Period of record: Maximum discharge, 11,500 ft³/s (326 m³/s) Jan. 31, 1963 (gage height, 12.32 ft or 3.755 m), from rating curve extended above 2,500 ft³/s (70.8 m³/s) on basis of slope-area measurement of maximum flow; minimum, 0.8 ft³/s (0.023 m³/s) Sept. 21, 1962.

REMARKS.--Records good. Beginning in 1884, flow regulated by Loon Lake (see sta 11429350). Original dam was dismantled during September and October 1962 to permit construction of a new earthfill dam which was completed Dec. 27, 1963. Loon Lake receives water from Rubicon River via Rubicon-Rockbound tunnel to Buck Island Lake and from Buck Island Lake to Loon Lake via Buck-Loon tunnel (see sta 11427940, 11428300). Prior to Dec. 3, 1961, water was diverted out of the basin in Georgetown Divide ditch. Robbs Peak tunnel 1.2 mi (1.9 km) upstream (see sta 11429800) began diversion of up to 1,320 ft³/s (37.4 m³/s) to Silver Creek basin October 1962. See schematic diagram of Middle Fork American and Rubicon River basins.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	9.3	5.5	5.5	5.8	9.2	9.2	16	10	12	12	12
2	10	7.7	5.6	5.3	6.0	9.3	9.2	20	10	12	12	12
3	11	7.7	9.8	5.3	6.0	9.0	9.1	19	9.7	12	12	12
4	11	7.5	10	5.4	6.0	9.0	8.9	17	9.6	12	12	10
5	11	6.4	6.9	5.4	6.2	9.2	9.0	14	13	12	12	11
6	11	5.5	6.3	8.9	6.3	10	8.4	12	9.7	12	12	11
7	11	5.7	6.1	8.0	6.5	10	7.7	13	9.2	12	12	11
8	11	5.7	6.0	11	6.9	11	7.8	13	9.4	12	11	11
9	10	5.5	5.9	7.4	10	10	8.0	14	9.7	12	12	10
10	10	5.5	5.8	6.9	8.7	9.1	7.8	15	11	12	12	9.9
11	10	5.7	5.8	6.6	7.2	8.7	8.0	16	12	12	12	10
12	9.7	6.0	6.3	6.4	7.0	8.2	8.5	23	10	12	12	11
13	8.1	5.5	6.1	6.2	12	8.4	8.4	52	12	12	12	11
14	9.0	5.5	6.0	6.2	9.6	8.1	8.7	85	11	12	12	10
15	9.0	5.5	5.8	6.1	8.1	8.1	8.5	60	11	12	12	9.8
16	9.5	5.5	5.8	6.2	7.4	8.0	8.1	12	11	12	12	8.7
17	9.7	5.5	5.8	6.0	7.0	7.5	7.9	22	11	12	12	10
18	9.7	5.5	5.8	6.2	7.0	7.7	7.9	72	11	12	13	14
19	9.4	5.5	5.6	6.0	8.9	8.7	8.2	72	11	14	13	11
20	9.4	5.4	5.7	5.9	9.4	9.0	8.5	10	11	12	12	10
21	9.4	7.6	5.9	6.1	8.1	9.1	9.6	8.4	11	12	12	10
22	9.4	6.3	6.3	6.1	7.7	9.2	10	8.7	11	12	12	10
23	9.4	5.8	5.6	5.8	7.5	7.9	10	10	11	12	12	10
24	9.2	5.6	5.7	5.9	7.6	9.7	19	17	12	12	12	10
25	9.2	5.8	5.6	5.9	7.8	24	16	26	11	12	12	10
26	9.2	5.6	5.6	6.0	7.9	13	11	13	11	12	12	10
27	9.3	5.6	5.8	5.9	8.2	10	11	14	11	12	12	10
28	12	5.5	5.7	5.8	8.8	9.3	11	11	12	11	11	10
29	9.7	5.5	5.5	5.8	---	9.1	11	11	12	12	11	10
30	9.4	5.5	5.6	5.8	---	9.4	13	12	12	11	11	9.9
31	10	---	5.6	5.8	---	9.6	---	11	---	12	11	---
TOTAL	305.7	180.9	189.5	195.6	215.6	298.5	289.4	719.1	326.3	372	369	315.3
MEAN	9.86	6.03	6.11	6.31	7.70	9.63	9.65	23.2	10.9	12.0	11.9	10.5
MAX	12	9.3	10	11	12	24	19	85	13	14	13	14
MIN	8.1	5.4	5.5	5.3	5.8	7.5	7.7	8.4	9.2	11	11	8.7
AC-FT	606	359	376	388	428	592	574	1430	647	738	732	625

CAL YR 1974 TOTAL 7346.3 MEAN 20.1 MAX 719 MIN 4.1 AC-FT 14570
WTR YR 1975 TOTAL 3776.9 MEAN 10.3 MAX 85 MIN 5.3 AC-FT 7490

11431800 PILOT CREEK ABOVE STUMPY MEADOWS LAKE, CALIF.

LOCATION.--Lat 38°53'41", long 120°34'02", in NE¼NW¼ sec.18, T.12 N., R.13 E., El Dorado County, on right bank 2.1 mi (3.4 km) upstream from Stumpy Meadows Dam, and 12.5 mi (20.1 km) east of Georgetown.

DRAINAGE AREA.--11.7 mi² (30.3 km²).

PERIOD OF RECORD.--October 1960 to current year. Prior to October 1971, published as "above Stumpy Meadows Reservoir."

GAGE.--Water-stage recorder. Altitude of gage is 4,280 ft (1,305 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 25.5 ft³/s (0.722 m³/s), 18,470 acre-ft/yr (22.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 245 ft³/s (6.94 m³/s) Mar. 25 (gage height, 2.95 ft or 0.899 m); minimum daily, 4.1 ft³/s (0.12 m³/s) Sept. 25, 26.
Period of record: Maximum discharge, 2,380 ft³/s (67.4 m³/s) Dec. 23, 1964 (gage height, 5.92 ft or 1.804 m in gage well, 6.6 ft or 2.01 m, from floodmarks), from rating curve extended above 170 ft³/s (4.81 m³/s) on basis of slope-area measurement of maximum flow; maximum gage height, 8.05 ft (2.454 m) Jan. 31, 1963; minimum daily discharge, 1.9 ft³/s (0.054 m³/s) Aug. 20-26, Sept. 4-7, 10, 1966.

REMARKS.--Records good. No regulation or diversion above station. See schematic diagram of Middle Fork American and Rubicon River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	9.7	7.2	8.2	11	25	46	63	35	12	6.5	5.3
2	4.3	8.1	7.2	8.0	16	26	43	67	33	12	6.4	5.2
3	4.8	7.5	22	7.6	15	27	41	82	30	11	6.3	5.1
4	5.4	7.3	30	8.0	14	27	40	87	27	11	6.1	5.2
5	5.6	7.2	16	7.6	14	29	38	76	26	11	6.0	4.9
6	5.2	7.0	12	18	15	34	36	71	25	11	5.9	4.8
7	5.0	7.6	11	19	15	43	33	71	23	10	5.8	4.6
8	5.8	8.5	9.6	43	15	58	32	75	22	10	5.7	4.6
9	6.4	8.2	9.1	21	47	56	31	83	20	9.7	5.6	4.7
10	6.1	7.5	8.7	16	38	49	31	91	19	9.6	5.5	5.0
11	5.6	7.4	8.4	14	26	43	30	97	19	9.4	5.4	5.3
12	5.2	7.2	8.8	12	22	38	30	101	18	9.1	5.4	4.9
13	5.1	7.1	9.7	11	64	36	31	108	17	8.9	5.3	4.6
14	5.1	6.9	8.6	11	49	34	32	116	17	8.8	5.2	4.5
15	5.0	6.7	8.4	10	33	33	31	111	16	9.2	5.1	4.5
16	4.9	6.7	8.1	9.7	27	32	30	100	16	10	5.1	4.7
17	4.9	6.7	7.8	9.4	23	29	29	100	16	9.4	5.0	4.6
18	4.8	7.6	7.8	9.4	21	28	29	103	16	9.0	8.1	4.6
19	4.7	7.2	7.5	9.3	28	32	30	100	16	8.7	9.5	4.6
20	4.8	6.9	7.5	9.1	37	35	31	88	15	8.4	8.0	4.6
21	4.8	15	7.6	9.1	28	32	34	70	15	8.2	8.4	4.4
22	4.9	16	7.9	9.0	25	36	37	63	14	7.9	7.3	4.3
23	5.0	10	8.0	8.8	23	32	39	62	14	7.7	6.5	4.3
24	5.1	9.0	8.1	8.8	22	39	65	61	16	7.5	6.5	4.2
25	5.2	9.5	8.1	8.8	21	177	97	60	15	7.3	6.3	4.1
26	5.3	8.8	7.5	9.1	21	106	78	57	14	7.1	6.1	4.1
27	5.8	8.2	7.3	8.7	21	81	68	54	13	6.9	6.0	4.2
28	19	7.8	8.2	9.0	23	66	64	49	13	6.8	6.0	4.2
29	10	7.5	8.0	9.3	---	57	64	45	12	6.8	5.9	4.3
30	8.7	7.5	7.7	9.6	---	53	63	41	12	6.8	5.6	4.2
31	11	---	7.9	10	---	51	---	38	---	6.7	5.4	---
TOTAL	187.7	248.3	301.7	361.5	714	1444	1283	2390	564	277.9	191.9	138.6
MEAN	6.05	8.28	9.73	11.7	25.5	46.6	42.8	77.1	18.8	8.96	6.19	4.62
MAX	19	16	30	43	64	177	97	116	35	12	9.5	5.3
MIN	4.2	6.7	7.2	7.6	11	25	29	38	12	6.7	5.0	4.1
AC-FT	372	493	598	717	1420	2860	2540	4740	1120	551	381	275

CAL YR 1974 TOTAL 12457.5 MEAN 34.1 MAX 309 MIN 4.2 AC-FT 24710
WTR YR 1975 TOTAL 8102.6 MEAN 22.2 MAX 177 MIN 4.1 AC-FT 16070

Peak discharge (base, 100 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
3-25	0630	2.95	245	5-14	2130	2.48	124
4-24	2130	2.49	126				

11433040 PILOT CREEK BELOW MUTTON CANYON, NEAR GEORGETOWN, CALIF.

LOCATION.--Lat 38°55'25", long 120°38'27", in NE¼NW¼ sec.4, T.12 N., R.12 E., El Dorado County, Eldorado National Forest, on left bank 450 ft (137 m) downstream from Mutton Canyon, 500 ft (150 m) downstream from Georgetown Divide diversion dam, 2.5 mi (4.0 km) downstream from Stumpy Meadows Dam, and 10 mi (16 km) east of Georgetown.

DRAINAGE AREA.--21.1 mi² (54.6 km²).

PERIOD OF RECORD.--June 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,760 ft (1,146 m), from topographic map.

AVERAGE DISCHARGE.--14 years, 30.8 ft³/s (0.872 m³/s), 22,310 acre-ft/yr (27.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 344 ft³/s (9.74 m³/s) Mar. 25 (gage height, 5.18 ft or 1.579 m); minimum daily, 1.4 ft³/s (0.040 m³/s) Sept. 26-30.

Period of record: Maximum discharge, 5,430 ft³/s (154 m³/s) Dec. 22, 1964 (gage height, 9.60 ft or 2.926 m), from rating curve extended above 300 ft³/s (8.50 m³/s) on basis of slope-area measurement at gage height 5.00 ft (1.524 m); maximum gage height, 10.06 ft (3.066 m) Dec. 23, 1964; minimum daily discharge, 0.20 ft³/s (0.006 m³/s) Sept. 24, Nov. 1-5, 1966.

REMARKS.--Records good. Flow regulated by Stumpy Meadows Lake, usable capacity, 20,000 acre-ft (24.7 hm³) completed in November 1961. Georgetown Irrigation District ditch, capacity, about 20 ft³/s (0.57 m³/s) diverts water out of Pilot Creek, 500 ft (150 m) above station. See schematic diagram of Middle Fork American and Rubicon River basins.

REVISIONS (WATER YEARS).--WRD Calif. 1965: 1962.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	2.2	4.3	1.9	2.5	8.2	91	106	28	6.7	2.1	1.7
2	2.7	2.0	4.4	1.9	3.0	8.6	83	107	24	7.8	2.0	1.7
3	2.9	1.9	9.8	1.9	2.5	8.2	83	129	20	7.7	1.9	1.7
4	2.9	1.9	5.3	2.1	2.7	7.8	89	139	16	7.7	1.9	1.7
5	2.9	1.9	2.9	2.1	2.4	10	98	124	14	7.6	1.8	1.7
6	2.7	1.8	2.4	12	2.6	14	84	116	13	7.4	1.8	1.6
7	2.7	2.7	2.2	9.4	3.1	28	68	114	11	7.3	1.8	1.6
8	3.0	2.4	2.1	25	4.8	32	64	114	9.3	7.2	1.8	1.6
9	3.0	2.0	2.0	6.3	34	27	60	118	6.8	7.1	1.7	1.7
10	3.0	1.9	2.0	4.0	23	24	58	118	4.8	7.3	1.8	1.7
11	2.8	1.9	2.0	3.4	12	22	56	117	3.9	7.2	2.0	1.7
12	2.7	1.8	2.3	3.0	8.4	20	54	121	3.9	6.5	1.9	1.7
13	2.7	1.8	2.4	2.8	32	20	55	124	9.1	6.3	1.9	1.7
14	2.7	1.8	2.1	2.7	19	19	59	131	8.6	6.3	1.9	1.6
15	2.6	1.8	2.1	2.6	12	18	61	131	5.4	6.6	1.9	1.6
16	2.5	1.8	2.0	2.5	9.6	19	57	119	4.4	6.6	1.9	1.6
17	4.8	1.8	1.9	2.4	7.7	28	54	112	4.2	6.4	1.8	1.6
18	3.9	2.1	1.9	2.4	6.6	40	52	111	6.2	6.2	2.8	1.6
19	4.1	4.6	1.9	2.3	16	53	52	109	8.7	6.0	3.2	1.6
20	4.0	8.5	1.9	2.2	18	68	52	98	8.5	5.8	2.6	1.6
21	4.0	14	2.0	2.2	11	82	56	81	7.8	5.7	2.3	1.6
22	4.0	11	2.1	2.2	9.7	92	59	71	7.2	5.6	2.2	1.5
23	4.2	9.7	1.9	2.1	8.8	69	65	62	7.1	5.2	2.1	1.5
24	4.3	9.0	1.9	2.1	8.3	84	109	56	8.8	5.0	2.0	1.5
25	2.9	10	1.9	2.1	8.1	314	165	54	7.6	4.8	1.9	1.5
26	1.9	7.4	1.9	2.4	7.7	237	139	50	7.3	3.2	1.9	1.4
27	2.1	4.6	2.0	2.3	7.7	178	124	46	7.1	2.4	1.9	1.4
28	8.1	4.4	2.0	2.1	8.1	144	116	41	6.9	2.2	1.9	1.4
29	2.5	4.3	1.9	2.1	---	122	112	36	6.8	2.2	1.8	1.4
30	2.0	4.3	1.9	2.0	---	110	110	33	6.2	2.2	1.8	1.4
31	2.8	---	1.9	2.1	---	103	---	30	---	2.1	1.8	---
TOTAL	100.1	127.3	79.3	116.6	291.3	2009.8	2385	2918	282.6	178.3	62.1	47.6
MEAN	3.23	4.24	2.56	3.76	10.4	64.8	79.5	94.1	9.42	5.75	2.00	1.59
MAX	8.1	14	9.8	25	34	314	165	139	28	7.8	3.2	1.7
MIN	1.9	1.8	1.9	1.9	2.4	7.8	52	30	3.9	2.1	1.7	1.4
AC-FT	199	252	157	231	578	3990	4730	5790	561	354	123	94

CAL YR 1974 TOTAL 18638.0 MEAN 51.1 MAX 477 MIN 1.8 AC-FT 36970
WTR YR 1975 TOTAL 8598.0 MEAN 23.6 MAX 314 MIN 1.4 AC-FT 17050

11433060 SOUTH FORK LONG CANYON CREEK DIVERSION TUNNEL NEAR VOLCANOVILLE, CALIF.

LOCATION.--Lat 39°03'04", long 120°28'14", in SW¼NE¼ sec.24, T.14 N., R.13 E., Placer County, Eldorado National Forest, on right bank at diversion dam, 3.3 mi (5.3 km) upstream from confluence with North and South Forks Long Canyon Creek, and 17.2 mi (27.7 km) east of Volcanoville.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder and sharp-crested weir. Altitude of gage is 4,630 ft (1,411 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 10.1 ft³/s (0.286 m³/s), 7,320 acre-ft/yr (9.03 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 251 ft³/s (7.11 m³/s) Nov. 12, 1973; no flow for part of each year.

REMARKS.--Tunnel completed in September 1965; diversion began in February 1966. Flow is diverted from South Fork Long Canyon Creek to a tunnel from Hell Hole Reservoir to Middle Fork powerplant on the Middle Fork American River. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	20	24	37	74	1.2		
2					0	20	23	47	69	.84		
3					0	19	22	55	63	.43		
4					0	18	20	49	58	.11		
5					0	19	19	39	53	0		
6					0	20	18	40	50	0		
7					0	23	16	47	46	0		
8					0	23	15	57	39	0		
9					0	21	15	67	32	0		
10					0	17	15	78	30	0		
11					0	16	15	83	26	0		
12					0	14	16	96	24	0		
13					0	14	19	111	21	0		
14					0	12	22	120	19	0		
15					0	12	19	109	17	0		
16					0	12	18	106	15	0		
17					0	11	16	113	13	0		
18					0	10	15	127	11	0		
19					0	13	16	130	9.3	0		
20					0	16	19	102	7.7	0		
21					3.9	14	26	82	6.8	0		
22					8.7	14	29	78	5.6	0		
23					8.0	12	27	81	4.8	0		
24					8.3	19	49	85	6.5	0		
25					10	84	60	84	6.2	0		
26					12	47	41	86	5.0	0		
27					14	35	34	83	3.5	0		
28					18	28	35	80	2.4	0		
29					---	24	36	78	2.0	0		
30					---	25	37	74	1.4	0		
31		---			---	27	---	74	---	0		---
TOTAL	0	0	0	0	82.9	659	736	2498	721.2	2.58	0	0
MEAN	0	0	0	0	2.96	21.3	24.5	80.6	24.0	.083	0	0
MAX	0	0	0	0	18	84	60	130	74	1.2	0	0
MIN	0	0	0	0	0	10	15	37	1.4	0	0	0
AC-FT	0	0	0	0	164	1310	1460	4950	1430	5.1	0	0

CAL YR 1974 TOTAL 1899.14 MEAN 5.20 MAX 110 MIN 0 AC-FT 3770
WTR YR 1975 TOTAL 4699.68 MEAN 12.9 MAX 130 MIN 0 AC-FT 9320

11433080 NORTH FORK LONG CANYON CREEK DIVERSION TUNNEL NEAR VOLCANOVILLE, CALIF.

LOCATION.--Lat 39°02'57", long 120°28'56", in SW¼NW¼ sec.24, T.14 N., R.13 E., Placer County, Eldorado National Forest, on left bank at diversion dam, 3.2 mi (5.1 km) upstream from confluence of North and South Forks Long Canyon Creek, and 16.9 mi (27.2 km) east of Volcanoville.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 4,700 ft (1,430 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 3.50 ft^3/s (0.099 m^3/s), 2,540 acre-ft/yr (31.3 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 55 ft^3/s (1.56 m^3/s) May 18, 1975; no flow for part of each year.

REMARKS.--No regulation or diversion above station. Tunnel completed in September 1965 and diversions began in February 1966. Flow is diverted from North Fork Long Canyon Creek to a tunnel from Hell Hole Reservoir to Middle Fork powerplant on the Middle Fork American River. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	6.7	6.3	15	13			
2					0	6.7	5.6	22	13			
3					0	5.8	5.2	24	22			
4					0	5.8	4.8	20	19			
5					0	5.8	3.4	16	18			
6					0	6.7	3.0	16	16			
7					0	9.2	2.6	23	13			
8					0	9.2	2.0	27	9.5			
9					0	7.5	1.7	34	6.9			
10					0	5.0	1.8	42	5.0			
11					0	3.2	1.6	43	4.0			
12					0	2.2	1.9	47	2.8			
13					0	2.0	3.4	47	2.1			
14					0	1.8	4.5	45	1.5			
15					0	1.7	2.9	46	.96			
16					0	1.6	2.2	48	.38			
17					0	1.2	2.1	52	.16			
18					0	.96	2.4	55	.05			
19					0	1.7	2.7	54	0			
20					0	3.2	4.6	40	0			
21					.30	2.5	9.6	29	0			
22					.60	2.1	11	28	0			
23					.50	1.6	9.0	33	0			
24					.60	6.7	20	37	0			
25					1.0	25	26	37	0			
26					1.6	16	14	37	0			
27					2.5	11	11	34	0			
28					5.0	7.4	13	32	0			
29					---	5.9	15	31	0			
30					---	7.1	14	30	0			
31		---			---	8.5	---	30	---			---
TOTAL	0	0	0	0	12.10	181.76	207.3	1074	147.35	0	0	0
MEAN	0	0	0	0	.43	5.86	6.91	34.6	4.91	0	0	0
MAX	0	0	0	0	5.0	25	26	55	22	0	0	0
MIN	0	0	0	0	0	.96	1.6	15	0	0	0	0
AC-FT	0	0	0	0	24	361	411	2130	292	0	0	0

CAL YR 1974 TOTAL 6.86 MEAN .01 MAX .26 MIN 0 AC-FT 14
WTR YR 1975 TOTAL 1622.51 MEAN 4.45 MAX 55 MIN 0 AC-FT 3220

11433100 LONG CANYON CREEK NEAR FRENCH MEADOWS, CALIF.

LOCATION.--Lat 39°01'16", long 120°30'53", in SE¼NW¼ sec.34, T.14 N., R.13 E., Placer County, Eldorado National Forest, on right bank 75 ft (23 m) downstream from North Fork Long Canyon, 6.5 mi (10.5 km) south of French Meadows, and 18 mi (29 km) east of Foresthill.

DRAINAGE AREA.--18.0 mi² (46.6 km²).

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,100 ft (1,250 m), from topographic map.

AVERAGE DISCHARGE (since diversion to Middle Fork American River powerplant).--9 years (1966-75), 33.5 ft³/s (0.949 m³/s), 24,270 acre-ft/yr (29.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 333 ft³/s (9.43 m³/s) Mar. 25 (gage height, 5.79 ft or 1.765 m); minimum daily, 1.1 ft³/s (0.031 m³/s) on several days during October.

Period of record: Maximum discharge, 4,690 ft³/s (133 m³/s) Dec. 23, 1964 (gage height, 11.20 ft or 3.414 m), from rating curve extended above 300 ft³/s (8.50 m³/s) on basis of slope-area measurements at gage heights 6.62 ft (2.018 m) and 10.27 ft (3.130 m); minimum daily, 0.08 ft³/s (0.002 m³/s) Sept. 27, 28, 1968.

REMARKS.--Water is diverted above this station to a diversion tunnel from Hell Hole Reservoir to Middle Fork American River powerplant via South Fork and North Fork Long Canyon diversion tunnels (see sta 11433060, 11433080); diversions began in February 1966. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	2.4	2.7	4.9	10	48	60	69	47	12	3.4	2.4
2	1.4	1.8	2.6	4.9	11	47	58	71	47	12	3.2	2.3
3	1.6	1.7	16	4.8	12	46	57	81	35	11	3.2	2.3
4	1.7	1.6	31	4.4	9.8	45	54	77	33	11	3.1	2.2
5	1.9	1.6	15	4.0	12	46	53	70	33	11	3.0	2.2
6	1.7	1.6	9.0	42	11	48	50	67	32	10	3.0	2.1
7	1.7	2.1	7.0	51	13	57	48	67	31	9.8	2.9	2.1
8	2.2	2.7	5.9	73	20	66	46	68	30	9.1	2.9	2.0
9	1.9	2.1	5.1	33	77	63	45	70	29	8.5	2.8	2.0
10	1.4	2.0	4.6	26	52	54	45	73	28	8.2	2.8	2.1
11	1.2	1.9	4.3	21	38	49	45	74	27	7.7	2.8	2.1
12	1.1	1.9	6.3	18	35	45	48	75	27	7.3	2.8	2.0
13	1.2	1.8	12	17	81	43	51	82	26	6.9	2.7	1.9
14	1.2	2.0	7.0	17	67	41	54	94	25	6.6	2.7	1.9
15	1.1	2.0	6.1	18	47	40	51	72	24	6.9	2.6	1.9
16	1.1	2.0	5.4	17	40	40	48	68	23	7.1	2.6	1.9
17	1.1	2.0	4.9	17	35	37	46	67	22	6.4	2.6	1.8
18	1.1	2.6	4.4	19	32	36	46	67	21	6.1	3.6	1.8
19	1.1	2.3	4.1	19	49	41	47	65	20	5.9	4.2	1.8
20	1.1	2.1	3.9	19	61	46	49	60	19	5.7	3.6	1.8
21	1.1	9.8	4.2	18	44	43	54	54	18	5.3	3.6	1.6
22	1.1	9.6	4.8	18	35	42	57	51	17	5.1	3.4	1.6
23	1.1	5.0	4.1	17	34	39	58	48	16	4.7	3.0	1.6
24	1.1	4.1	4.5	16	35	50	96	46	18	4.6	2.9	1.5
25	1.1	4.6	4.0	16	36	197	111	44	17	4.4	2.8	1.5
26	1.2	4.4	3.3	17	37	99	82	42	17	4.2	2.8	1.5
27	1.4	3.6	3.8	15	40	78	74	43	15	4.0	2.7	1.5
28	6.4	3.2	4.0	13	45	68	72	41	14	3.8	2.7	1.5
29	2.1	3.0	4.5	12	---	64	71	40	13	3.7	2.7	1.5
30	1.6	2.8	3.7	11	---	64	70	39	12	3.6	2.6	1.5
31	2.9	---	5.3	11	---	65	---	38	---	3.5	2.5	---
TOTAL	49.0	90.3	203.5	594.0	1018.8	1749	1746	1923	736	216.1	92.2	55.9
MEAN	1.58	3.01	6.56	19.2	36.4	56.4	58.2	62.0	24.5	6.97	2.97	1.86
MAX	6.4	9.8	31	73	81	197	111	94	47	12	4.2	2.4
MIN	1.1	1.6	2.6	4.0	9.8	36	45	38	12	3.5	2.5	1.5
AC-FT	97	179	404	1180	2020	3470	3460	3810	1460	429	183	111

CAL YR 1974 TOTAL 18260.6 MEAN 50.0 MAX 504 MIN 1.0 AC-FT 36220
WTR YR 1975 TOTAL 8473.8 MEAN 23.2 MAX 197 MIN 1.1 AC-FT 16810

11433200 RUBICON RIVER NEAR FORESTHILL, CALIF.

LOCATION.--Lat 38°59'33", long 120°43'14", in SE¼NW¼ sec.11, T.13 N., R.11 E., Placer County, Eldorado National Forest, on right bank 0.6 mi (1.0 km) upstream from Ralston powerhouse, 1.2 mi (1.9 km) upstream from confluence of Rubicon River and Middle Fork American River, and 5.6 mi (9.0 km) southeast of Foresthill.

DRAINAGE AREA.--315 mi² (816 km²).

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,200 ft (366 m), from topographic map. October 1958 to May 17, 1963, at site 2.0 mi (3.2 km) upstream, 150 ft (46 m) downstream from Ralston Bridge, and May 17, 1963, to Mar. 30, 1965, at site 2.1 mi (3.4 km) upstream, 100 ft (30 m) upstream from Ralston Bridge at datum 1,362.20 ft (415.199 m) above mean sea level.

AVERAGE DISCHARGE (prior to construction of Hell Hole Dam).--7 years (1958-65), 609 ft³/s (17.2 m³/s), 440,900 acre-ft/yr (544 hm³/yr); 10 years (1965-75), 308 ft³/s (8.723 m³/s), 223,100 acre-ft/yr (275 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,390 ft³/s (96.0 m³/s) Mar. 25 (gage height, 10.69 ft or 3.258 m); minimum daily, 42 ft³/s (1.19 m³/s) Sept. 7.

Period of record: Maximum discharge, unknown, Dec. 23, 1964 (gage height, 55.4 ft or 16.89 m), from floodmarks), caused by overtopping of the partly constructed Hell Hole Dam; next highest peak discharge, 83,000 ft³/s (2,350 m³/s) Feb. 1, 1963 (gage height, 35.0 ft or 10.67 m, former site and datum); minimum daily, 10 ft³/s (0.28 m³/s) Sept. 20-27, 1962. Maximum discharge since construction of Hell Hole Dam in 1965, 15,100 ft³/s (428 m³/s) Jan. 21, 1970 (gage height, 14.60 ft or 4.450 m); minimum daily, 24 ft³/s (0.68 m³/s) Sept. 12, 1966.

Floods of December 1937, November 1950, and December 1955 had approximate discharges of 44,000 ft³/s (1,250 m³/s), 56,000 ft³/s (1,590 m³/s), and 73,000 ft³/s (2,070 m³/s), respectively, on basis of 1958-64 stage-discharge relation and U.S. Forest Service floodmarks.

REMARKS.--Flow regulated by Hell Hole Reservoir (see sta 11428700), Loon Lake (see sta 11429350), and Stumpy Meadows Lake, capacity, 20,000 acre-ft (24.7 hm³). Water is imported from French Meadows Reservoir on Middle Fork American River through tunnel to French Meadows powerplant on shore of Hell Hole Reservoir. Water is diverted from Hell Hole Reservoir through tunnel to Middle Fork powerplant on Middle Fork American River. Robbs Peak tunnel and powerplant (see sta 11429800) divert water to South Fork American River basin. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1968: 1967(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	75	67	67	126	296	607	654	355	126	67	46
2	53	72	67	67	275	302	560	673	351	122	67	46
3	52	67	118	67	204	298	545	770	302	122	67	46
4	49	64	253	69	266	288	549	840	280	122	67	44
5	49	72	155	72	193	291	573	716	260	118	67	44
6	49	72	104	155	173	329	540	662	254	115	67	44
7	49	78	90	288	164	449	497	655	231	111	67	42
8	49	97	84	505	208	632	467	670	218	111	61	43
9	52	90	78	284	817	573	452	702	206	107	59	44
10	54	84	78	189	799	487	454	745	193	104	56	44
11	56	81	75	160	433	430	455	771	185	104	56	44
12	56	81	75	138	326	383	477	791	178	100	59	44
13	56	81	81	126	817	373	497	867	173	97	59	45
14	54	78	84	126	668	362	524	979	173	97	59	45
15	54	75	78	118	431	356	518	985	169	97	56	45
16	47	61	78	115	340	420	484	806	160	104	56	45
17	52	61	75	115	285	374	455	789	155	107	56	44
18	64	67	75	111	253	362	435	853	151	100	64	45
19	64	75	72	111	303	411	427	891	151	100	84	48
20	61	67	72	107	470	521	427	721	151	100	87	47
21	61	100	72	104	352	542	445	599	151	97	84	47
22	61	151	72	100	291	679	478	548	147	97	81	47
23	61	97	72	90	269	544	492	527	142	90	75	46
24	52	84	69	90	262	620	704	517	147	87	69	45
25	56	84	67	87	258	2480	1210	526	160	84	63	45
26	49	84	67	87	258	1510	878	489	151	84	62	45
27	47	75	72	90	258	1080	764	466	142	75	59	45
28	111	72	97	87	277	861	715	436	138	72	56	45
29	100	72	81	81	---	728	690	410	134	72	53	46
30	64	69	75	75	---	669	679	388	130	72	50	45
31	64	---	72	81	---	658	---	369	---	69	48	---
TOTAL	1800	2386	2675	3962	9776	18308	16998	20815	5738	3063	1981	1351
MEAN	58.1	79.5	86.3	128	349	591	567	671	191	98.8	63.9	45.0
MAX	111	151	253	505	817	2480	1210	985	355	126	87	48
MIN	47	61	67	67	126	288	427	369	130	69	48	42
AC-FT	3570	4730	5310	7860	19390	36310	33720	41290	11380	6080	3930	2680

CAL YR 1974 TOTAL 150073 MEAN 411 MAX 3960 MIN 47 AC-FT 297700
WTR YR 1975 TOTAL 88853 MEAN 243 MAX 2480 MIN 42 AC-FT 176200

11433260 NORTH FORK OF MIDDLE FORK AMERICAN RIVER NEAR FORESTHILL, CALIF.

LOCATION.--Lat 39°01'27", long 120°43'03", in NE¼NW¼ sec.35, T.14 N., R.11 E., Placer County, Tahoe National Forest, on right bank 1.0 mi (1.6 km) downstream from El Dorado Canyon, and 4.8 mi (7.7 km) east of Foresthill.

DRAINAGE AREA.--88.9 mi^2 (230.3 km^2).

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,300 ft (396 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 275 ft^3/s (7.788 m^3/s), 199,200 acre-ft/yr (246 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,860 ft^3/s (138 m^3/s) Mar. 25 (gage height, 9.34 ft or 2.847 m); minimum daily, 24 ft^3/s (0.68 m^3/s) Oct. 16-18.

Period of record: Maximum discharge, 13,600 ft^3/s (385 m^3/s) Jan. 21, 1970 (gage height, 12.80 ft or 3.901 m in gage well, 13.5 ft or 4.11 m, from floodmarks); minimum daily, 17 ft^3/s (0.48 m^3/s) Oct. 23 to Nov. 5, 1966.

REMARKS.--No storage or diversion above station. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	57	36	38	96	474	569	580	509	92	41	37
2	26	42	36	38	168	454	520	600	456	92	44	37
3	26	37	63	37	137	447	501	700	403	91	46	37
4	28	35	188	42	174	423	477	740	377	88	39	36
5	28	34	96	43	134	437	464	630	365	84	38	35
6	28	33	67	267	117	502	429	630	349	79	39	35
7	27	35	57	468	134	627	391	650	313	74	38	35
8	27	48	52	928	218	837	365	720	276	71	38	35
9	29	40	49	305	1020	750	348	838	249	68	38	35
10	30	37	47	194	913	601	355	958	229	70	37	36
11	29	36	44	152	464	500	357	1010	217	69	37	36
12	27	35	46	132	365	433	384	1040	207	63	36	36
13	26	34	69	117	1180	413	435	1090	197	58	36	36
14	25	34	56	108	893	384	511	1130	186	57	36	37
15	25	33	52	104	515	370	463	1050	176	57	35	36
16	24	33	49	102	394	392	433	937	166	68	35	34
17	24	32	47	98	328	350	341	940	158	61	34	33
18	24	38	45	95	284	334	379	983	152	57	54	32
19	25	42	43	96	493	435	373	955	145	54	101	32
20	25	36	42	97	840	581	391	787	135	52	62	31
21	25	57	42	95	486	507	473	609	128	51	96	30
22	25	114	47	93	386	529	539	553	125	50	56	29
23	25	60	42	91	339	450	539	560	115	48	46	28
24	26	48	37	88	326	733	848	605	130	47	43	28
25	26	56	41	87	332	3280	1210	619	130	46	41	28
26	26	53	39	91	350	1490	827	611	121	45	39	27
27	27	45	46	90	358	1060	694	584	107	43	38	27
28	98	42	59	77	416	802	612	554	98	42	38	26
29	73	39	46	80	---	646	600	540	93	42	39	26
30	41	37	43	70	---	608	600	520	89	42	38	25
31	44	---	39	76	---	623	---	520	---	42	37	---
TOTAL	965	1302	1665	4399	11860	20472	15428	23243	6401	1903	1375	975
MEAN	31.1	43.4	53.7	142	424	660	514	750	213	61.4	44.4	32.5
MAX	98	114	188	928	1180	3280	1210	1130	509	92	101	37
MIN	24	32	36	37	96	334	341	520	89	42	34	25
AC-FT	1910	2580	3300	8730	23520	40610	30600	46100	12700	3770	2730	1930

CAL YR 1974 TOTAL 129662 MEAN 355 MAX 5830 MIN 24 AC-FT 257200
WTR YR 1975 TOTAL 89988 MEAN 247 MAX 3280 MIN 24 AC-FT 178500

11433300 MIDDLE FORK AMERICAN RIVER NEAR FORESTHILL, CALIF.

LOCATION.--Lat 39°00'23", long 120°45'40", in NW¼NW¼ sec.4, T.13 N., R.11 E., Placer County, Tahoe National Forest, on right bank 1.7 mi (2.7 km) downstream from Oxbow powerhouse, and 3.2 mi (5.1 km) east of Foresthill.

DRAINAGE AREA.--524 mi² (1,357 km²).

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,060 ft (323 m), from topographic map. Prior to Oct. 22, 1965, at site 3.2 mi (5.1 km) downstream at different datum.

AVERAGE DISCHARGE.--17 years, 1,132 ft³/s (32.06 m³/s), 820,100 acre-ft/yr (1.01 km³/yr).

EXTREMES.--Current year: Maximum discharge, 11,200 ft³/s (317 m³/s) Mar. 25 (gage height, 12.72 ft or 3.877 m); minimum daily, 136 ft³/s (3.85 m³/s) Dec. 19, 25.

Period of record: Maximum discharge, 310,000 ft³/s (8,780 m³/s) Dec. 23, 1964 (gage height, 69.0 ft or 21.03 m, from floodmarks, site and datum then in use), caused by overtopping of the partly constructed Hell Hole Dam on the Rubicon River, from rating curve extended above 28,000 ft³/s (793 m³/s) on basis of slope-area measurement at gage height 38.0 ft (11.58 m) and slope-conveyance study at gage height 69.0 ft (21.03 m) at site and datum then in use; next highest peak, 113,000 ft³/s (3,200 m³/s) Feb. 1, 1963 (gage height, 38.00 ft or 11.582 m, site and datum then in use); minimum, 35 ft³/s (0.99 m³/s) Oct. 19, 20, 1961.

REMARKS.--Flow regulated by French Meadows Reservoir (see sta 11427400), Hell Hole Reservoir (see sta 11428700), Loon Lake (see sta 11429350), Stumpy Meadows Lake, usable capacity, 20,000 acre-ft (24.7 hm³), and Ralston and Oxbow powerplants. Robbs Peak tunnel (see sta 11429800) and Georgetown Divide ditch, capacity, about 25 ft³/s (0.71 m³/s) divert water out of basin above station. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1130	1130	664	148	318	1030	2180	2080	1450	746	623	822
2	1130	801	823	293	640	848	2140	2110	1550	713	638	699
3	1140	562	680	279	604	1270	2150	2020	1730	710	719	720
4	1130	1120	872	387	646	1330	2140	2150	1650	365	755	878
5	674	1120	777	430	735	1540	2030	1950	1640	367	635	1080
6	628	1120	806	561	673	1560	1600	1620	1610	287	770	878
7	1070	1120	308	1150	520	1710	1960	1630	1560	703	740	762
8	1100	1160	293	1850	613	1960	1730	1750	1500	779	620	928
9	1100	537	363	1020	2010	1670	1630	1880	1450	778	460	903
10	1090	429	137	729	2200	1820	1560	2080	1440	771	550	811
11	1080	1040	168	559	1310	1690	1610	2210	1400	748	630	844
12	612	1130	179	498	1150	1710	1560	2290	1240	707	668	865
13	583	1140	196	419	2200	1630	1670	2420	1190	749	672	913
14	1030	1140	210	576	1980	1420	1970	2650	1340	705	643	765
15	1050	1130	186	670	1210	1510	1730	2570	1340	731	626	729
16	858	637	137	672	989	1600	1700	2160	1300	837	721	894
17	1030	628	175	556	982	1490	1650	2180	1320	672	721	806
18	1040	1060	242	270	877	1450	1480	2360	1300	765	646	899
19	648	1010	136	270	996	1510	1450	2390	1280	391	746	729
20	534	1110	170	455	1600	1890	1200	2020	1210	445	786	919
21	1000	1150	157	459	1640	1990	1540	1600	1010	840	815	976
22	1050	1270	162	324	1170	2240	1750	1420	828	710	775	936
23	1050	815	143	600	1090	1990	1740	1430	720	699	725	1000
24	1040	558	168	358	1350	2330	2130	1470	805	684	691	1110
25	1060	1050	136	348	1430	7880	3220	1530	841	646	700	1110
26	722	1130	144	372	1440	4370	2090	1480	714	722	527	1120
27	602	1110	278	459	1450	3350	1790	1680	821	711	720	1120
28	659	640	373	415	1260	2820	2130	1790	718	659	638	1120
29	843	701	210	335	---	2540	2120	1670	755	662	562	1120
30	1130	544	213	333	---	2050	2180	1590	821	657	884	1130
31	1110	---	269	397	---	2210	---	1540	---	635	747	---
TOTAL	28923	28092	9775	16192	33283	64408	55830	59720	36533	20594	21153	27586
MEAN	933	936	315	522	1189	2078	1861	1926	1218	664	682	920
MAX	1140	1270	872	1850	2200	7880	3220	2650	1730	840	884	1130
MIN	534	429	136	148	318	848	1200	1420	714	287	460	699
AC-FT	57370	55720	19390	32120	66020	127800	110700	118500	72460	40850	41960	54720

CAL YR 1974 TOTAL 584857 MEAN 1602 MAX 11400 MIN 87 AC-FT 1160000
WTR YR 1975 TOTAL 402089 MEAN 1102 MAX 7880 MIN 136 AC-FT 797500

11433400 CANYON CREEK NEAR GEORGETOWN, CALIF.

LOCATION.--Lat 38°56'03", long 120°52'21", in SW¼NW¼ sec.33, T.13 N., R.10 E., El Dorado County, Eldorado National Forest, on right bank 0.7 mi (1.1 km) downstream from West Canyon, and 2.6 mi (4.2 km) northwest of Georgetown.

DRAINAGE AREA.--12.5 mi^2 (32.4 km^2)

PERIOD OF RECORD.--July 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,995 ft (608 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 21.0 ft^3/s (0.595 m^3/s), 15,210 acre-ft/yr (18.8 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 872 ft^3/s (24.7 m^3/s) Mar. 25 (gage height, 10.18 ft or 3.103 m); minimum daily, 3.2 ft^3/s (0.091 m^3/s) Sept. 23, 25.
Period of record: Maximum discharge, 1,300 ft^3/s (36.8 m^3/s) Jan. 21, 1970 (gage height, 11.01 ft or 3.356 m); minimum daily, 1.8 ft^3/s (0.05 m^3/s) Oct. 1, 4-12, 1966.

REMARKS.--Records good. Small diversions above station for irrigation and domestic purposes. See schematic diagram of Middle Fork American and Rubicon River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	9.0	7.5	5.4	19	9.4	24	15	9.0	6.2	4.2	4.1
2	13	7.2	7.1	5.3	84	9.2	22	15	9.1	6.3	4.1	3.9
3	7.3	6.2	16	5.3	39	8.7	19	17	9.5	6.3	3.9	3.8
4	6.9	6.2	19	5.5	83	8.4	22	16	9.4	6.2	3.8	3.6
5	7.0	6.5	11	5.8	30	9.3	27	15	9.1	6.3	3.7	3.6
6	5.9	5.0	8.0	29	19	10	29	14	8.4	6.0	3.6	3.5
7	5.5	5.5	5.4	27	15	16	30	14	7.5	5.9	3.6	3.4
8	5.5	6.0	5.0	83	15	36	29	13	7.3	5.6	3.6	3.4
9	5.5	5.2	4.8	18	88	28	30	13	7.1	5.5	3.6	3.5
10	5.6	5.0	4.8	15	96	20	30	12	7.0	5.3	3.6	3.9
11	5.7	5.0	5.0	13	33	16	28	12	7.6	5.3	3.5	3.7
12	6.3	5.0	6.5	12	24	14	24	13	7.5	5.4	3.8	3.7
13	6.5	5.0	7.1	10	142	14	22	19	6.8	5.2	3.9	3.8
14	6.8	5.0	6.6	9.3	58	16	22	17	6.6	5.5	4.0	3.6
15	5.9	5.0	6.5	9.0	31	18	21	17	6.7	5.6	4.1	3.6
16	6.5	5.0	6.4	7.3	21	54	20	16	6.6	6.3	4.0	3.6
17	9.5	8.8	6.2	6.8	17	31	19	16	8.0	5.9	3.7	3.5
18	7.0	8.4	6.1	7.5	14	22	18	19	7.5	5.5	5.4	3.5
19	5.5	5.5	6.0	7.6	25	27	17	16	7.4	5.4	6.4	3.4
20	5.4	4.9	5.9	7.6	36	31	16	13	7.1	5.2	7.8	3.3
21	5.4	13	5.2	7.4	21	42	17	13	7.0	4.9	6.7	3.4
22	5.4	8.5	5.4	7.4	17	89	16	12	6.2	4.8	6.8	3.3
23	5.5	7.2	5.4	7.2	14	51	16	10	6.2	4.4	6.7	3.2
24	5.7	8.0	5.0	7.2	13	84	25	11	7.4	4.4	5.3	3.3
25	5.9	9.9	5.0	7.1	12	403	29	11	7.7	5.1	4.9	3.2
26	6.2	8.3	5.0	7.5	11	99	21	11	6.9	4.3	4.9	3.3
27	11	7.9	6.2	7.4	10	59	19	9.8	6.5	3.8	4.8	3.3
28	28	7.7	12	7.1	9.6	42	18	11	6.3	3.9	4.7	3.3
29	8.7	7.5	7.4	7.2	---	33	17	10	5.9	4.4	4.8	3.3
30	9.5	7.4	6.1	7.9	---	28	16	9.8	5.8	4.4	4.7	3.3
31	11	---	5.5	8.1	---	26	---	9.1	---	4.2	4.4	---
TOTAL	240.6	204.8	219.1	370.9	996.6	1354.0	663	419.7	221.1	163.5	143.0	105.3
MEAN	7.76	6.83	7.07	12.0	35.6	43.7	22.1	13.5	7.37	5.27	4.61	3.51
MAX	28	13	19	83	142	403	30	19	9.5	6.3	7.8	4.1
MIN	5.4	4.9	4.8	5.3	9.6	8.4	16	9.1	5.8	3.8	3.5	3.2
AC-FT	477	406	435	736	1980	2690	1320	832	439	324	284	209

CAL YR 1974 TOTAL 9492.2 MEAN 26.0 MAX 350 MIN 4.8 AC-FT 18830
WTR YR 1975 TOTAL 5101.6 MEAN 14.0 MAX 403 MIN 3.2 AC-FT 10120

Peak discharge (base, 170 ft^3/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-13	1130	7.53	227	2-10	0130	7.09	173
3-25	0400	10.18	872				

11433400 CANYON CREEK NEAR GEORGETOWN, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: July 1966 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 21.0°C July 25-27; minimum, 0.5°C Jan. 2, 3, 31, Feb. 1.
Period of record:
Water temperatures: Maximum (1966-72, 1973 to current year), 23.5°C July 22, 1966; minimum, 0.5°C Jan. 2, 3, 31, Feb. 1, 1975.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	11.0	9.5	8.0	4.5	3.5	2.5	1.5	3.0	0.5	8.0	6.0
2	14.0	12.0	8.5	7.0	6.0	4.0	2.0	0.5	4.5	3.5	9.0	7.0
3	14.0	11.5	8.5	6.5	7.5	6.0	2.5	0.5	5.5	4.0	8.0	5.5
4	14.0	12.0	8.0	6.5	7.5	6.0	4.0	2.5	5.5	5.0	8.5	5.5
5	13.0	11.0	8.0	6.0	6.5	5.0	4.0	3.0	5.5	4.5	7.5	7.0
6	12.5	10.0	8.0	6.0	6.0	5.0	6.0	4.0	6.0	5.0	8.0	7.0
7	13.0	10.0	8.0	7.0	5.5	4.5	6.5	6.0	7.0	6.0	7.5	7.0
8	13.5	12.0	8.5	7.0	5.0	3.5	6.5	5.5	8.0	6.5	8.5	6.5
9	13.5	11.0	7.5	6.0	4.5	3.5	5.5	4.5	7.5	6.5	8.0	7.0
10	13.0	10.5	7.5	6.0	4.5	3.0	5.5	4.5	7.5	6.5	8.0	6.5
11	13.0	10.0	8.0	6.0	6.0	4.0	5.0	3.5	6.5	5.5	9.0	7.0
12	12.5	10.0	8.0	6.0	6.5	5.0	3.5	3.0	6.0	5.5	8.0	5.5
13	12.0	9.5	8.0	6.5	6.0	5.5	3.5	2.5	7.5	6.0	7.0	4.0
14	11.5	9.0	8.5	7.0	6.5	5.0	4.0	2.5	7.0	5.5	7.0	4.5
15	12.0	9.5	8.0	6.5	5.5	4.5	4.5	2.5	6.0	4.0	6.5	5.5
16	12.0	9.0	8.5	6.5	5.0	4.0	4.5	3.0	6.0	4.5	7.5	5.5
17	12.0	9.5	9.0	8.0	4.5	4.0	4.5	3.0	5.0	3.5	7.0	5.5
18	12.0	9.5	9.0	8.0	4.5	3.0	4.5	3.0	5.5	3.5	9.0	6.5
19	12.0	9.5	8.0	6.5	4.0	3.0	4.5	3.0	6.5	5.0	8.0	7.0
20	12.0	9.5	8.0	6.0	4.5	3.0	5.0	3.5	7.0	5.5	8.0	6.5
21	11.5	9.0	8.5	7.5	5.0	3.5	5.0	3.0	5.5	3.5	6.0	5.0
22	11.0	8.5	8.0	6.5	5.0	3.0	5.0	3.5	5.5	3.0	6.5	5.5
23	10.5	8.0	6.5	5.5	3.0	2.0	5.0	3.5	6.0	3.5	8.0	6.0
24	10.5	8.0	6.0	5.0	2.5	1.0	5.0	3.5	7.0	4.0	8.0	7.0
25	11.0	8.5	7.0	6.0	2.5	1.5	5.0	3.5	7.5	5.0	8.0	6.5
26	11.0	8.5	6.0	5.0	3.0	1.0	5.5	4.0	7.5	5.0	8.0	5.5
27	10.5	9.0	5.5	4.5	4.0	3.0	4.0	2.0	8.5	6.0	8.0	5.0
28	10.5	9.5	5.5	4.0	4.5	3.5	3.0	1.5	8.5	6.0	8.0	4.5
29	10.0	8.5	5.0	4.0	3.5	2.5	3.0	2.0	---	---	9.5	4.5
30	9.5	8.0	5.0	4.0	3.5	2.5	2.0	1.0	---	---	10.0	6.0
31	9.5	9.0	---	---	3.0	2.0	2.5	0.5	---	---	10.0	6.5
MONTH	14.0	8.0	9.5	4.0	7.5	1.0	6.5	0.5	8.5	0.5	10.0	4.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	5.0	13.0	8.0	18.0	14.0	16.0	12.0	19.5	13.0	16.0	12.5
2	9.0	5.0	13.0	9.0	16.5	13.0	16.5	11.5	20.0	15.0	16.0	12.5
3	7.5	6.5	10.5	8.5	17.0	12.5	16.0	12.0	20.0	15.0	16.5	12.5
4	6.5	5.0	10.5	7.0	17.5	11.5	16.5	12.5	20.0	15.0	16.5	12.5
5	5.5	3.5	11.0	6.5	18.0	14.0	17.0	12.5	20.0	15.0	17.0	13.0
6	6.5	4.0	12.0	6.5	18.5	14.0	17.5	13.0	19.5	15.0	17.5	13.0
7	6.5	4.5	13.0	7.5	18.0	13.5	18.0	13.5	19.0	13.0	17.5	13.5
8	7.5	5.0	14.0	8.5	18.0	13.0	18.5	13.5	20.0	14.0	17.0	14.0
9	9.0	5.0	14.0	9.0	18.0	12.5	19.0	14.0	20.0	14.0	17.5	15.0
10	9.5	5.0	14.0	9.5	18.0	13.0	18.0	15.0	20.0	14.0	16.5	15.0
11	10.0	5.0	15.0	9.5	17.5	13.5	19.5	14.5	20.0	16.0	15.0	12.0
12	10.5	6.0	15.5	10.0	18.5	14.0	19.5	14.0	20.0	15.5	15.5	12.5
13	11.0	6.5	16.0	11.0	19.0	14.0	19.5	14.5	20.0	15.5	15.5	12.5
14	9.0	7.0	15.5	12.0	19.5	14.5	19.5	14.5	19.5	15.0	15.5	11.0
15	7.5	5.5	14.5	11.0	19.5	15.0	16.5	15.0	19.5	16.0	15.5	12.0
16	8.0	5.5	15.0	10.0	18.5	14.5	18.5	15.5	19.5	15.0	15.5	12.0
17	10.0	5.0	15.5	11.0	17.5	14.0	19.0	15.0	19.0	15.0	16.0	13.0
18	10.0	5.5	16.5	12.0	17.0	13.0	19.0	15.0	17.5	16.5	15.5	13.5
19	10.5	7.0	15.5	12.5	16.0	12.5	19.5	14.5	16.5	15.0	15.5	12.0
20	11.0	6.5	13.5	10.5	16.5	12.5	19.5	15.0	17.0	13.0	15.5	12.5
21	11.0	8.0	13.5	9.0	17.5	13.0	20.0	15.0	16.5	15.0	15.5	12.0
22	9.5	6.5	14.0	10.0	17.5	13.0	20.0	15.0	17.0	13.0	15.0	12.0
23	10.0	7.5	15.0	10.5	17.0	13.5	20.0	15.5	17.5	13.0	15.0	11.5
24	9.0	8.0	16.0	11.5	14.5	12.5	20.5	15.5	17.5	13.0	15.0	11.5
25	9.0	6.5	15.5	11.5	15.0	10.5	21.0	16.5	18.0	13.5	14.5	11.0
26	9.0	5.5	16.0	12.0	16.0	11.0	21.0	16.0	17.5	14.5	14.5	10.5
27	11.0	6.0	16.0	11.5	16.5	12.0	21.0	15.5	16.5	14.0	14.0	5.5
28	11.5	7.0	16.0	11.5	16.5	12.0	20.5	15.5	16.5	13.0	13.5	10.5
29	12.0	7.0	16.5	12.0	17.0	12.0	20.0	15.5	16.5	12.0	13.5	10.0
30	11.5	8.0	16.5	12.0	16.5	12.0	19.0	14.5	16.0	12.5	13.5	10.0
31	---	---	17.5	13.0	---	---	19.0	13.5	16.5	12.5	---	---
MONTH	12.0	3.5	17.5	6.5	19.5	10.5	21.0	11.5	20.0	12.0	17.5	5.5

11433420 MAINE BAR CANYON CREEK NEAR GREENWOOD, CALIF.

LOCATION.--Lat 38°55'34", long 120°56'51", in NW¼NW¼ sec.2, T.12 N., R.9 E., El Dorado County, on right bank 2.8 mi (4.5 km) northwest of Greenwood, and 4.5 mi (7.2 km) northeast of Cool.

DRAINAGE AREA.--0.76 mi² (1.97 km²).

PERIOD OF RECORD.--March to September 1972 (discharge measurements only), October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,520 ft (463 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 41 ft³/s (1.16 m³/s) Mar. 25 (gage height, 1.33 ft or 0.405 m); minimum daily, 0.02 ft³/s (0.0006 m³/s) on several days.
Period of record: Maximum discharge, 79 ft³/s (2.24 m³/s) Jan. 12, 1973 (gage height, 1.82 ft or 0.555 m); minimum daily, 0.01 ft³/s (<0.001 m³/s) July 10-12, July 28 to Aug. 2, 1973.

REMARKS.--Records good. No diversion or regulation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.33	.15	.33	3.3	.87	1.3	.40	.11	.06	.04	.05
2	.03	.27	.15	.27	4.0	.76	1.1	.38	.11	.06	.03	.04
3	.05	.21	1.4	.27	3.0	.67	1.2	.73	.10	.06	.03	.02
4	.05	.21	1.1	.33	4.0	.58	1.7	.57	.09	.05	.03	.02
5	.05	.21	.58	.27	2.0	.84	3.0	.45	.08	.05	.03	.02
6	.05	.21	.49	4.3	1.4	.89	2.6	.37	.08	.05	.03	.02
7	.03	.33	.42	2.8	1.4	2.6	2.2	.37	.08	.04	.03	.02
8	.03	.49	.42	5.5	4.8	4.6	1.9	.33	.07	.04	.03	.02
9	.03	.33	.33	1.4	11	2.6	1.6	.31	.06	.04	.03	.03
10	.03	.27	.33	.87	4.6	2.1	1.4	.30	.06	.04	.03	.04
11	.03	.27	.33	.58	2.8	1.5	1.2	.24	.06	.04	.03	.04
12	.03	.21	.42	.49	9.8	1.2	1.0	.23	.06	.04	.03	.03
13	.03	.21	.33	.42	14	1.7	.94	.19	.03	.04	.03	.03
14	.03	.21	.33	.42	5.2	2.1	1.0	.20	.03	.04	.04	.03
15	.03	.21	.33	.33	3.2	2.2	.93	.20	.04	.06	.04	.03
16	.03	.21	.33	.33	2.4	4.7	.82	.19	.04	.06	.04	.03
17	.03	.21	.33	.27	1.6	2.6	.72	.18	.05	.05	.04	.03
18	.07	.33	.33	.27	1.4	1.9	.66	.17	.05	.05	.13	.02
19	.07	.27	.33	.27	4.0	3.2	.63	.18	.06	.05	.09	.03
20	.07	.27	.33	.27	3.0	2.4	.58	.19	.07	.04	.07	.03
21	.07	.87	.33	.27	2.0	3.8	.56	.19	.06	.04	.06	.03
22	.07	.58	.33	.27	1.5	3.9	.54	.18	.05	.04	.05	.03
23	.11	.42	.33	.27	1.4	2.7	.54	.17	.06	.04	.05	.03
24	.11	.42	.33	.27	1.1	6.4	1.8	.17	.10	.04	.04	.02
25	.11	.49	.33	.27	.98	19	1.0	.16	.08	.03	.04	.02
26	.11	.33	.33	.27	.87	7.1	.71	.14	.07	.03	.05	.02
27	.15	.21	.49	.27	.87	4.0	.61	.13	.06	.03	.05	.02
28	.76	.21	1.5	.21	.76	2.8	.54	.13	.06	.03	.05	.02
29	.27	.21	.49	.21	---	2.2	.48	.11	.07	.04	.05	.03
30	.21	.21	.42	.21	---	1.8	.45	.11	.07	.04	.04	.03
31	.49	---	.33	.49	---	1.5	---	.10	---	.04	.05	---
TOTAL	3.25	9.21	13.97	23.00	96.38	95.21	33.71	7.77	2.01	1.36	1.38	.83
MEAN	.10	.31	.45	.74	3.44	3.07	1.12	.25	.067	.044	.045	.028
MAX	.76	.87	1.5	5.5	14	19	3.0	.73	.11	.06	.13	.05
MIN	.02	.21	.15	.21	.76	.58	.45	.10	.03	.03	.03	.02
AC-FT	6.4	18	28	46	191	189	67	15	4.0	2.7	2.7	1.6

CAL YR 1974 TOTAL 423.40 MEAN 1.16 MAX 24 MIN .02 AC-FT 840
WTR YR 1975 TOTAL 288.08 MEAN .79 MAX 19 MIN .02 AC-FT 571

Peak discharge (base, 20 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-8	2200	1.02	25	3-25	0300	1.33	41
2-12	1800	.98	23				

11433500 *MIDDLE FORK AMERICAN RIVER NEAR AUBURN, CALIF.*

LOCATION.--Lat 38°55'05", long 121°00'51", in NE¼SW¼ sec.6, T.12 N., R.9 E., Placer County, on right bank at Mountain Quarry Co. plant, 1.4 mi (2.2 km) upstream from mouth, and 3.3 mi (5.3 km) northeast of Auburn.

DRAINAGE AREA.--614 mi² (1,590 km²).

PERIOD OF RECORD.--October 1911 to current year. Prior to October 1934, published as "near East Auburn."

GAGE.--Water-stage recorder. Datum of gage is 552.35 ft (168.356 m) above mean sea level (levels by Murray Engineers). Prior to December 1930, nonrecording gages near present site at different datums. December 1930 to Mar. 1, 1963, water-stage recorder at site 0.4 mi (0.6 km) upstream at different datum.

AVERAGE DISCHARGE.--64 years, 1,341 ft³/s (37.98 m³/s), 971,600 acre-ft/yr (1.20 km³/yr).

EXTREMES.--Current year: Maximum discharge, 13,700 ft³/s (388 m³/s) Mar. 25 (gage height, 16.61 ft or 5.063 m); minimum daily, 125 ft³/s (3.54 m³/s) July 20.

Period of record: Maximum discharge, 253,000 ft³/s (7,160 m³/s) Dec. 23, 1964 (gage height, 60.4 ft or 18.41 m, from floodmarks), from rating curve extended above 69,000 ft³/s (1,950 m³/s) on basis of slope-area measurement of maximum flow (caused by overtopping of the partly constructed Hell Hole Dam); next highest peak, 121,000 ft³/s (3,430 m³/s) Feb. 1, 1963 (gage height, 43.1 ft or 13.14 m, from floodmarks, site and datum then in use); minimum, 20 ft³/s (0.57 m³/s) Sept. 6, 1931, Sept. 19, 1934.

REMARKS.--Records good. Natural flow of stream affected by French Meadows Reservoir (see sta 11427400), Hell Hole Reservoir (see sta 11428700), Loon Lake (see sta 11429350), Stumpy Meadows Lake, usable capacity, 20,000 acre-ft (24.7 hm³), diversion dams on Rubicon and Little Rubicon Rivers, and Ralston and Oxbow powerplants. Robbs Peak powerplant (see sta 11429300) diverts water out of basin. See schematic diagram of Middle Fork American and Rubicon River basins.

REVISIONS (WATER YEARS).--WSP 861: 1928. WSP 1315-A: 1913-15, 1919, 1921, 1923(M), 1929(M), 1930. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1010	1070	528	204	472	1070	2230	2040	1470	731	684	799
2	1010	836	873	210	1030	973	2170	2080	1470	678	493	755
3	1010	503	529	228	832	1180	2140	1950	1650	610	638	490
4	1010	978	879	357	1080	1380	2150	2170	1600	564	779	832
5	716	1030	798	291	795	1360	2120	1950	1590	333	585	979
6	553	1040	805	626	805	1530	1730	1630	1570	299	612	800
7	888	1040	487	1190	644	1670	2090	1590	1500	379	612	713
8	1010	1070	185	1990	758	2170	1860	1670	1460	857	598	877
9	1010	676	433	1180	2240	1860	1770	1790	1440	721	554	851
10	1010	376	176	915	2910	1860	1730	1960	1360	658	490	786
11	1010	766	146	557	1600	1710	1680	2080	1340	664	615	752
12	676	1030	145	544	1300	1710	1660	2160	1190	655	674	744
13	514	1030	170	523	2820	1660	1670	2280	1120	733	674	849
14	925	1030	196	549	2530	1560	1970	2500	1290	703	577	751
15	1010	1030	169	690	1500	1510	1890	2510	1250	622	551	687
16	832	649	159	752	1120	1850	1670	2120	1250	810	690	718
17	1020	613	143	584	1060	1670	1730	2040	1210	616	651	869
18	1010	865	157	441	928	1600	1560	2230	1230	782	626	698
19	670	941	195	268	1020	1550	1460	2320	1220	642	645	697
20	668	1020	148	316	1940	2020	1290	2000	1150	125	721	790
21	800	1070	144	420	1740	2090	1450	1610	962	888	847	871
22	1010	1190	160	377	1310	2770	1740	1390	788	578	680	853
23	1010	910	151	484	1070	2240	1740	1390	769	637	736	891
24	1000	540	130	483	1280	2420	1840	1430	714	675	600	984
25	1010	847	126	275	1300	9900	3480	1490	854	604	647	984
26	728	1070	147	365	1260	5460	2220	1450	732	692	516	983
27	599	1050	182	422	1340	3740	1820	1520	786	714	646	985
28	691	672	334	480	1260	3040	2050	1720	707	573	623	987
29	782	693	346	316	---	2680	2070	1660	679	626	461	988
30	1070	580	203	346	---	2180	2100	1520	806	619	884	988
31	1070	---	230	302	---	2230	---	1480	---	586	718	---
TOTAL	27332	26215	9474	16685	37944	70643	57080	57730	35157	19374	19819	24951
MEAN	882	874	306	538	1355	2279	1903	1862	1172	625	639	832
MAX	1070	1190	879	1990	2910	9900	3480	2510	1650	888	884	988
MIN	514	376	126	204	472	973	1290	1390	679	125	461	490
AC-FT	54210	52000	18790	33090	75260	140100	113200	114500	69730	38430	39310	49490

CAL YR 1974 TOTAL 606111 MEAN 1661 MAX 12700 MIN 90 AC-FT 1202000
WTR YR 1975 TOTAL 402404 MEAN 1102 MAX 9900 MIN 125 AC-FT 798200

11433800 NORTH FORK AMERICAN RIVER BELOW AUBURN DAMSITE, NEAR AUBURN, CALIF.

LOCATION.--Lat 38°52'20", long 121°03'18", in SE¼SW¼ sec.23, T.12 N., R.8 E., Placer County, on right bank 1,080 ft (329 m) upstream from Knickerbocker Creek, and 2.0 mi (3.2 km) southeast of Auburn.

DRAINAGE AREA.--973 mi² (2,520 km²).

PERIOD OF RECORD.--May 1972 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum discharge, 24,400 ft³/s (691 m³/s) Mar. 25 (gage height, 75.75 ft or 23.089 m); minimum daily, 153 ft³/s (4.33 m³/s) Dec. 25.

Period of record: Maximum discharge, 34,100 ft³/s (966 m³/s) Jan. 17, 1974 (gage height, 79.37 ft or 24.192 m); minimum daily, 153 ft³/s (4.33 m³/s) Dec. 25, 1974.

REMARKS.--Records good. Natural flow of stream affected by many reservoirs and diversions (see REMARKS for sta 11427000, 11433500).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1060	1220	589	317	694	2090	3820	3480	4800	1300	803	885
2	1100	1030	946	278	2040	2030	3610	3690	4490	1220	624	837
3	1090	538	612	255	1760	2190	3500	3730	4390	1140	756	497
4	1050	1030	1500	450	2230	2350	3500	4180	4330	1070	894	937
5	772	1210	1250	348	1620	2340	3520	3530	4350	815	701	1100
6	539	1190	1030	964	1410	2590	3110	3030	4470	769	727	907
7	881	1070	690	2290	1150	2940	3390	2960	4310	836	719	830
8	1080	1130	295	3710	1380	4700	3120	3250	3840	1160	708	987
9	1080	817	504	2280	4040	4080	2970	3750	3600	1120	684	953
10	1090	437	267	1480	5600	3530	2920	4200	3390	1040	589	875
11	1080	754	192	952	3390	3090	2830	4610	3230	1060	711	843
12	779	1130	193	846	2500	2880	2820	4800	3040	1000	792	818
13	487	1130	238	759	5820	2750	2820	5050	3000	1060	775	943
14	949	1130	348	742	5200	2670	3230	5530	3190	1010	697	837
15	1080	1120	265	874	3270	2550	3110	5620	3040	915	640	749
16	940	749	235	946	2440	3160	2810	4830	2920	1060	758	761
17	1050	658	210	833	2100	2910	2840	4840	2710	904	754	946
18	1080	924	212	670	1780	2690	2610	5340	2410	1050	751	741
19	734	1050	268	479	1860	2680	2450	5610	2150	972	815	761
20	711	1110	194	510	3600	3560	2320	4980	2000	363	880	814
21	785	1210	183	667	3020	3450	2490	3720	1810	1010	1030	927
22	1080	1460	200	619	2370	4870	2930	3240	1630	788	843	899
23	1080	1180	203	660	1980	3930	3000	3430	1590	834	875	952
24	1080	633	174	705	2120	4140	3100	3950	1560	860	716	1060
25	1080	934	153	525	2150	17500	5750	4320	1610	786	779	1060
26	784	1230	155	558	2140	9670	4120	4200	1480	853	676	1060
27	648	1190	200	616	2140	6520	3360	4340	1440	864	696	1040
28	845	810	548	669	2180	5290	3420	4470	1340	713	709	1040
29	963	834	570	507	---	4630	3460	4530	1300	775	621	1040
30	1210	649	254	462	---	3970	3550	4440	1410	755	906	1040
31	1200	---	287	457	---	3940	---	4580	---	734	787	---
TOTAL	29387	29557	12965	26420	71984	125690	96480	132230	84830	28836	23416	27139
MEAN	948	985	418	852	2571	4055	3216	4265	2828	930	755	905
MAX	1210	1460	1500	3710	5820	17500	5750	5620	4800	1300	1030	1100
MIN	487	437	153	255	694	2030	2320	2960	1300	363	589	497
AC-FT	58290	58630	25720	52400	142800	249300	191400	262300	168300	57200	46450	53830

CAL YR 1974 TOTAL 990962 MEAN 2715 MAX 23700 MIN 153 AC-FT 1966000
WTR YR 1975 TOTAL 688934 MEAN 1887 MAX 17500 MIN 153 AC-FT 1367000

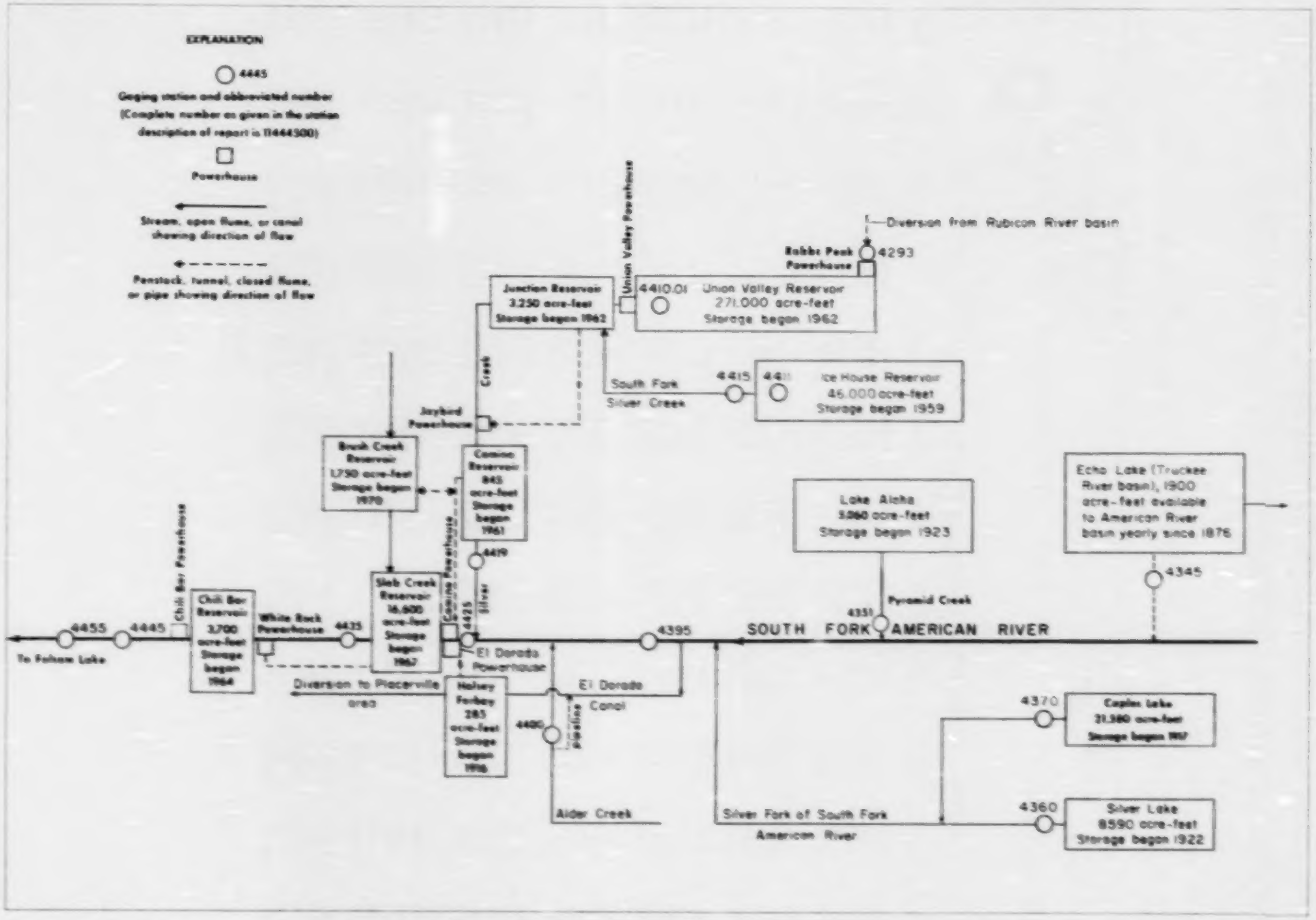

EXPLANATION
4445
Gaging station and abbreviated number (Complete number as given in the station description of report is 11444500)
Powerhouse
Stream, open flume, or canal showing direction of flow
Penstock, tunnel, closed flume, or pipe showing direction of flow
Diversion from Rubicon River basin
Rabbit Peak Powerhouse
4293
Union Valley Powerhouse
4410.01
Union Valley Reservoir 271,000 acre-feet Storage began 1962
Junction Reservoir 3,250 acre-feet Storage began 1962
South Fork Silver Creek
4415
4411
Ice House Reservoir 46,000 acre-feet Storage began 1959
Creek
Jaybird Powerhouse
Brush Creek Reservoir 1,750 acre-feet Storage began 1970
Camino Reservoir 845 acre-feet Storage began 1961
4419
Silver
Camino Powerhouse
4425
Slab Creek Reservoir 16,600 acre-feet Storage began 1967
4435
White Rock Powerhouse
Chili Bar Powerhouse
Chili Bar Reservoir 3,700 acre-feet Storage began 1964
4445
4455
To Folsom Lake
El Dorado Powerhouse
Diversion to Placerville area
Halsey Forbay 285 acre-feet Storage began 1916
El Dorado Canal
4400
Pipeline
Alder Creek
4395
SOUTH FORK AMERICAN RIVER
4351
Pyramid Creek
Lake Aloha 5,060 acre-feet Storage began 1923
Echo Lake (Truckee River basin), 1900 acre-feet available to American River basin yearly since 1876
4345
Silver Fork of South Fork American River
4370
Caples Lake 21,580 acre-feet Storage began 1917
4360
Silver Lake 8590 acre-feet Storage began 1922

FIGURE 11.–Schematic diagram showing diversions and storage in South Fork American River basin.

11434500 ECHO LAKE CONDUIT NEAR PHILLIPS, CALIF.

LOCATION.--Lat 38°49'52", long 120°02'12", in NW¼ sec.6, T.11 N., R.18 E., El Dorado County, Eldorado National Forest, on right bank in Berkeley Municipal Camp, 0.5 mi (0.8 km) downstream from intake, and 2.4 mi (3.9 km) northeast of Phillips.

PERIOD OF RECORD.--August 1923 to current year. Prior to October 1974 diversion seasons only. Monthly discharge only for July 1933, published in WSP 1315-A. Published as Echo Lake flume near Vade prior to 1943 and as Echo Lake conduit near Vade for seasons 1944-53.

GAGE.--Water-stage recorder. Altitude of gage is 7,420 ft (2,262 m), from topographic map. Prior to July 16, 1929, nonrecording gage at site 0.4 mi (0.6 km) upstream at different datum.

EXTREMES.--Period of record: Maximum daily discharge, 31 ft^3/s (0.88 m^3/s) Sept. 10, 1963, Sept. 13-15, 1971; no flow for most of each year.

REMARKS.--Conduit diverts from Echo Lake, capacity, 1,900 acre-ft (2.34 hm^3) in Truckee River basin into basin of South Fork American River for power and irrigation. See schematic diagram of South Fork American River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supefvision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8										0	16
2	3.4										0	23
3	2.9										0	27
4	2.2										0	27
5	1.7										0	27
6	.70										0	27
7	0										0	26
8	0										0	26
9	0										0	27
10	0										0	27
11	0										0	27
12	0										0	27
13	0										0	26
14	0										0	26
15	0										0	26
16	0										0	25
17	0										0	25
18	0										0	24
19	0										0	24
20	0										0	23
21	0										0	22
22	0										0	21
23	0										0	20
24	0										0	20
25	0										5.7	18
26	0										8.5	17
27	0										8.0	15
28	0										13	4.2
29	0				---						15	.10
30	0				---						16	0
31	0	---			---		---		---		16	---
TOTAL	15.70	0	0	0	0	0	0	0	0	0	82.2	643.30
MEAN	.51	0	0	0	0	0	0	0	0	0	2.65	21.4
MAX	4.8	0	0	0	0	0	0	0	0	0	16	27
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	31	0	0	0	0	0	0	0	0	0	163	1280

WTR YR 1975 TOTAL 761.20 MEAN 2.03 MAX 27 MIN 0 AC-FT 1470

11435100 PYRAMID CREEK AT TWIN BRIDGES, CALIF.

LOCATION.--Lat 38°48'57", long 120°06'58", in NW¼SW¼ sec.9, T.11 N., R.17 E., El Dorado County, Eldorado National Forest, on right bank 0.5 mi (0.8 km) northeast of Twin Bridges, and 2.2 mi (3.5 km) west of Phillips.

DRAINAGE AREA.--8.76 mi² (22.69 km²).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,320 ft (1,926 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 43.0 ft³/s (1.218 m³/s), 31,150 acre-ft/yr (38.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 293 ft³/s (8.30 m³/s) June 6 (gage height, 3.11 ft or 0.948 m); minimum daily, 0.69 ft³/s (0.020 m³/s) Oct. 26, 27.
Period of record: Maximum discharge, 858 ft³/s (24.3 m³/s) June 26, 1971 (gage height, 4.62 ft or 1.408 m), from rating curve extended above 160 ft³/s (4.53 m³/s); minimum daily, 0.22 ft³/s (0.006 m³/s) Sept. 25, 1972.

REMARKS.--Flow regulated by Lake Aloha, capacity, 5,060 acre-ft (6.24 hm³); no contents Sept. 30, 1974, and Sept. 30, 1975. Lake of the Woods, Ropi Lake, and Toem Lakes (unknown capacities) are also regulated at times. See schematic diagram of South Fork American River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	4.3	6.0	7.7	11	20	16	19	202	94	86	7.3
2	1.3	4.5	5.7	7.1	11	18	15	28	191	92	83	7.1
3	1.4	4.6	8.9	6.6	12	17	14	29	190	90	76	7.0
4	1.4	4.8	13	7.2	12	17	14	22	187	96	75	6.9
5	1.3	4.8	11	7.0	13	16	16	19	200	98	84	6.7
6	1.3	4.6	9.0	15	13	15	14	19	212	98	85	6.6
7	1.3	5.2	8.6	12	13	14	14	24	196	93	88	6.7
8	1.3	7.4	8.6	16	14	13	13	37	177	72	92	10
9	1.5	7.0	8.1	21	15	12	13	54	169	65	88	69
10	1.4	6.6	7.9	13	19	11	13	74	168	61	93	69
11	1.3	6.8	7.8	11	15	11	13	85	189	51	96	64
12	1.2	7.2	14	10	13	11	12	90	192	47	97	59
13	1.1	7.6	12	10	14	11	12	103	198	45	104	52
14	1.0	7.6	9.8	10	14	11	14	123	192	43	107	42
15	.95	7.4	9.8	11	14	11	12	112	189	42	106	29
16	.94	7.0	10	11	12	11	13	102	191	38	105	18
17	.91	6.2	9.7	12	12	11	13	114	154	37	103	12
18	.89	7.9	8.4	13	12	11	12	130	128	36	124	7.9
19	.88	7.6	7.7	14	13	11	13	132	122	35	126	5.6
20	.87	6.0	7.4	14	14	10	13	100	125	33	108	4.9
21	.83	7.6	7.3	14	14	9.8	17	63	108	31	107	4.7
22	.78	11	7.4	14	14	24	21	62	114	28	105	5.6
23	.74	9.8	8.0	14	13	25	19	94	122	27	98	4.6
24	.73	9.5	9.3	16	13	19	16	155	102	25	95	4.1
25	.70	9.7	7.5	17	14	30	16	173	82	25	82	3.5
26	.69	8.9	6.7	15	14	20	14	175	86	25	20	2.2
27	.69	8.2	6.5	12	15	16	14	170	91	24	10	2.6
28	1.8	7.1	7.3	11	18	18	17	168	97	31	8.0	3.1
29	2.1	6.5	8.8	11	---	16	19	172	103	83	8.3	3.3
30	2.1	6.2	7.8	10	---	15	20	179	100	53	7.9	3.3
31	3.5	---	8.4	10	---	18	---	207	---	57	7.4	---
TOTAL	38.50	209.6	269.2	372.6	381	472.8	442	3034	4577	1675	2475.4	527.7
MEAN	1.24	6.99	8.68	12.0	13.6	15.3	14.7	97.9	153	54.0	79.9	17.6
MAX	3.5	11	14	21	19	30	21	207	212	98	126	69
MIN	.69	4.3	5.7	6.6	11	9.8	12	19	82	24	7.4	2.2
AC-FT	76	416	534	739	756	938	877	6020	9080	3320	4910	1050

CAL YR 1974 TOTAL 17766.80 MEAN 48.7 MAX 286 MIN .69 AC-FT 35240
WTR YR 1975 TOTAL 14474.80 MEAN 39.7 MAX 212 MIN .69 AC-FT 28710

11436000 SILVER LAKE OUTLET NEAR KIRKWOOD, CALIF.

LOCATION.--Lat 38°40'17", long 120°07'18", in SW¼ sec.32, T.10 N., R.17 E., Amador County, Eldorado National Forest, on right bank 1,000 ft (305 m) downstream from Silver Lake Dam, and 3.5 mi (5.6 km) southwest of Kirkwood.

DRAINAGE AREA.--15.2 mi^3 (39.4 km^2).

PERIOD OF RECORD.--September 1922 to current year. Records for water year 1923 incomplete, yearly estimate published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 7,199.5 ft (2,194.41 m) above mean sea level, unadjusted.

AVERAGE DISCHARGE.--53 years, 34.8 ft^3/s (0.986 m^3/s), 25,210 acre-ft/yr (31.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 796 ft^3/s (22.5 m^3/s) May 14 (gage height, 5.12 ft or 1.561 m); minimum daily, 0.43 ft^3/s (0.012 m^3/s) Dec. 29.

Period of record: Maximum discharge, 1,100 ft^3/s (31.2 m^3/s), revised, Nov. 21, 1950 (gage height, 6.03 ft or 1.838 m); from rating curve extended above 430 ft^3/s (12.2 m^3/s); no flow many days in February, March 1948, Jan. 13, 14, 1954, Nov. 3, 1959, to Feb. 5, 1960.

REVISIONS.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in the water-supply papers indicated.

WSP	Water year	Date	Discharge (ft^3/s)	Gage height (feet)
651,1315A	1927	May 16, 1927	428	3.94
691,1315A	1929	June 16, 1929	450	4.00
736,1315A	1932	July 1, 1932	552	4.28
831,1315A	1937	June 16, 1937	544	4.25
861,1315A	1938	Dec. 11, 1937	790	5.10
901,1315A	1940	May 12, 1940	420	3.92
931,1315A	1941	May 12, 1941	489	4.10
961,1315A	1942	June 6, 1942	450	4.00
981,1315A	1943	Apr. 28, 1943	396	3.85
1011,1315A	1944	May 23, 1944	544	4.25
1041,1315A	1945	May 8, 1945	450	4.00
1181,1315A	1950	June 2, 1950	375	3.79
1215,1735	1951	Nov. 21, 1950	1,100	6.03
1245,1735	1952	June 6, 1952	458	4.02
1285,1735	1953	June 18, 1953	424	3.93
1395,1735	1955	June 8, 1955	489	4.10
1445,1735	1956	Dec. 23, 1955	675	4.72
1515,1735	1957	June 1, 1957	501	4.13
1565,1735	1958	May 23, 1958	549	4.27
1931	1963	Feb. 1, 1963	640	4.60
1931	1965	Dec. 24, 1964	882	5.39
WRD Calif. 1967	1967	June 27, 1967	497	4.12
WRD Calif. 1969	1969	Jan. 22, 1969	649	4.63
WRD Calif. 1970	1970	Jan. 22, 1970	481	4.08
WRD Calif. 1973	1973	May 18, 1973	446	3.99

REMARKS.--Flow regulated by Silver Lake 1,000 ft (305 m) upstream, capacity, 3,840 acre-ft (4.73 hm^3), at spillway level and 8,590 acre-ft (10.6 hm^3) with 11 ft (3.4 m) of flashboards; contents in Silver Lake, 2,310 acre-ft (2.85 hm^3) Sept. 30, 1974, and 3,280 acre-ft (4.04 hm^3) Sept. 30, 1975. Some water, in addition to that released through dam and over spillway, escapes from Silver Lake through porous rock formation. See schematic diagram of South Fork American River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

11426000 SILVER LAKE OUTLET NEAR KIRKWOOD, CALIF.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	15	1.4	1.0	3.0	1.6	2.2	1.9	388	77	2.2	3.0
2	43	13	1.5	1.3	1.6	1.5	2.0	2.1	400	72	2.1	2.4
3	41	14	1.9	2.4	1.9	1.4	1.9	2.1	390	63	2.0	2.3
4	40	14	5.1	3.2	4.3	1.4	2.0	2.1	382	56	2.0	2.1
5	39	14	3.8	3.4	7.2	1.3	2.2	3.0	385	51	2.0	49
6	25	14	2.9	6.4	8.6	1.3	2.2	2.0	352	49	2.0	106
7	2.8	12	2.6	6.4	13	1.3	2.2	2.1	324	51	1.9	103
8	2.8	11	2.3	7.1	27	1.4	2.0	2.3	270	46	2.1	70
9	2.8	8.3	2.2	6.5	45	1.4	2.0	2.4	172	42	2.6	25
10	2.8	6.7	2.0	5.4	47	1.4	2.0	2.6	188	31	2.8	24
11	2.8	5.5	1.9	4.8	25	1.4	1.9	2.9	154	9.2	2.6	27
12	2.8	4.9	2.0	4.2	8.4	1.4	1.9	3.2	189	3.2	2.4	40
13	2.6	4.4	2.0	3.7	3.3	1.4	1.9	31	223	3.2	2.3	52
14	2.6	3.7	2.0	2.8	3.5	1.4	2.3	448	232	3.1	2.2	57
15	2.4	3.2	2.0	2.8	3.3	1.4	2.9	290	233	3.0	2.1	73
16	2.4	2.9	2.0	2.8	3.0	1.4	2.3	170	236	3.0	2.3	83
17	2.2	2.4	1.9	2.8	3.0	1.4	2.0	141	222	3.0	2.6	81
18	15	2.2	1.9	2.8	2.8	2.0	2.0	170	178	3.0	2.5	84
19	35	1.9	1.7	2.8	2.8	1.9	1.9	193	117	2.8	2.6	92
20	34	1.8	1.7	2.7	2.6	1.9	1.9	202	51	2.8	2.4	91
21	32	2.0	1.6	2.7	2.6	1.5	2.0	193	21	2.8	2.2	81
22	30	2.3	1.6	2.7	2.4	2.0	2.0	182	20	2.9	1.9	73
23	29	2.0	1.5	2.7	2.4	2.0	2.0	179	54	2.8	2.2	63
24	27	1.9	1.4	2.7	2.2	2.0	2.0	192	111	2.7	2.3	58
25	26	1.7	1.3	2.7	2.0	2.0	2.4	206	86	2.6	2.0	57
26	23	1.7	1.2	2.7	1.8	2.0	2.1	226	69	2.6	3.9	56
27	20	1.6	1.4	2.7	1.7	2.0	1.9	238	70	2.6	6.1	55
28	20	1.6	1.9	2.7	1.7	2.0	1.9	252	73	2.5	6.1	21
29	18	1.4	.43	2.7	---	2.0	1.9	268	79	2.4	6.7	1.8
30	18	1.3	1.1	2.7	---	2.0	1.9	290	80	2.4	4.6	1.9
31	18	---	.90	2.7	---	2.2	---	352	---	2.3	3.2	---
TOTAL	606.0	172.4	59.13	105.0	233.1	51.3	61.8	4251.7	5749	602.9	86.9	1534.5
MEAN	19.5	5.75	1.91	3.39	8.33	1.65	2.06	137	192	19.4	2.80	51.2
MAX	44	15	5.1	7.1	47	2.2	2.9	448	400	77	6.7	106
MIN	2.2	1.3	.43	1.0	1.6	1.3	1.9	1.9	20	2.3	1.9	1.8
AC-FT	1200	342	117	208	462	102	123	8430	11400	1200	172	3040

CAL YR 1974 TOTAL 16978.03 MEAN 46.5 MAX 331 MIN .43 AC-FT 33680
WTR YR 1975 TOTAL 13513.73 MEAN 37.0 MAX 448 MIN .43 AC-FT 26800

11437000 CAPLES LAKE OUTLET NEAR KIRKWOOD, CALIF.

LOCATION.--Lat 38°42'29", long 120°03'00", in SW¼SW¼ sec.18, T.10 N., R.18 E., Alpine County, Eldorado National Forest, on right bank 500 ft (152 m) downstream from main dam and outlet gate of Caples Lake, and 1.3 mi (2.1 km) east of Kirkwood.

DRAINAGE AREA.--13.5 mi² (35.0 km²).

PERIOD OF RECORD.--September 1922 to current year. Records for water year 1945 incomplete, yearly estimate published in WSP 1315-A. Prior to October 1969, published as Twin Lakes Outlet near Kirkwood.

GAGE.--Water-stage recorder and concrete control for outlet, and water-stage recorder for spillway. Altitude of gage is 7,700 ft (2,347 m), from topographic map.

AVERAGE DISCHARGE (including flow over Caples Lake spillway).--53 years, 37.1 ft³/s (1.051 m³/s), 26,880 acre-ft/yr (33.1 hm³/yr).

EXTREMES.--Current year: Maximum combined daily discharge for outlet and spillway, 209 ft³/s (5.92 m³/s) June 17; minimum daily, 2.3 ft³/s (0.065 m³/s) Jan. 28, Sept. 29.
Period of record: Maximum combined daily discharge for outlet and spillway, 669 ft³/s (18.9 m³/s) June 3, 1969 minimum daily, 0.1 ft³/s (0.003 m³/s) Mar. 25-31, 1944, Nov. 27, 28, 1956.

REMARKS.--Flow regulated by Caples Lake 500 ft (152 m) upstream, capacity, 19,750 acre-ft (24.4 hm³), spillway level, 21,580 acre-ft (26.6 hm³) with 3 ft (0.9 m) of flashboards, contents of which were 18,000 acre-ft (22.2 hm³) Sept. 30, 1974, and 18,400 acre-ft (22.7 hm³) Sept. 30, 1975. Flow over Caples Lake spillway occurred June 6 to Aug. 31 and is included in table below. No diversion above station. See schematic diagram of South Fork American River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	107	120	54	5.8	4.4	3.2	3.3	3.6	80	8.4	101
2	107	110	123	53	9.5	4.4	3.1	3.5	3.5	82	3.8	97
3	108	115	114	53	9.5	4.4	3.1	3.5	3.6	83	8.3	91
4	110	120	76	52	9.5	4.1	3.0	3.3	3.6	85	11	93
5	109	121	50	52	7.0	3.8	3.0	3.3	3.6	101	11	58
6	65	122	65	29	5.4	3.8	3.1	3.3	3.8	121	10	3.8
7	3.3	120	79	4.8	5.4	3.8	3.1	3.5	3.8	140	10	3.6
8	3.3	119	77	4.8	5.4	3.8	3.1	3.6	3.8	140	5.7	3.5
9	3.3	118	84	4.8	5.5	3.8	3.2	3.7	3.8	139	3.1	3.5
10	3.1	117	90	4.8	5.5	3.8	3.3	4.0	3.8	138	3.1	3.5
11	3.1	121	87	4.8	5.5	3.8	3.1	4.2	3.8	121	3.0	3.4
12	3.1	126	83	4.8	5.5	3.7	3.1	5.2	4.6	106	3.0	3.3
13	3.1	124	65	4.8	5.5	3.7	3.1	9.2	60	84	3.0	3.3
14	3.1	122	47	3.6	5.5	3.8	3.1	9.7	139	54	3.0	3.5
15	3.1	123	43	3.6	5.5	3.8	3.1	4.1	171	20	2.9	3.3
16	3.1	124	40	3.6	5.5	3.8	3.1	4.6	206	21	2.9	13
17	15	122	44	3.6	5.5	3.8	3.1	4.9	209	56	2.9	19
18	92	121	49	3.6	5.5	3.8	3.1	4.9	206	56	8.8	18
19	97	119	45	3.6	5.5	3.9	3.2	3.7	204	55	42	26
20	108	117	51	3.6	5.5	3.8	3.2	2.9	166	55	17	31
21	113	116	58	3.6	5.5	3.9	3.2	2.7	145	53	8.1	44
22	118	114	56	3.6	5.4	3.8	3.3	2.8	122	44	4.1	56
23	119	112	56	3.2	5.3	3.8	3.3	3.2	109	30	4.1	63
24	109	109	55	2.5	4.8	3.8	3.3	3.4	112	27	3.9	71
25	87	108	47	2.5	4.4	3.8	3.3	3.4	111	20	28	77
26	120	105	39	2.5	4.4	3.8	3.2	3.2	111	22	80	78
27	120	108	39	2.5	4.4	3.6	3.2	3.2	89	26	89	81
28	119	111	38	2.3	4.4	3.3	3.2	3.2	73	21	93	29
29	112	115	38	2.9	---	3.3	3.2	4.0	75	10	93	2.3
30	111	118	46	3.8	---	3.3	3.2	3.5	79	9.3	95	3.0
31	112	---	54	3.8	---	3.4	---	3.6	---	9.0	99	---
TOTAL	2189.6	3504	1958	385.0	162.1	117.8	94.8	124.6	2432.3	2008.3	760.1	1086.0
MEAN	70.6	117	63.2	12.4	5.79	3.80	3.16	4.02	81.1	64.8	24.5	36.2
MAX	120	126	123	54	9.5	4.4	3.3	9.7	209	140	99	101
MIN	3.1	105	38	2.3	4.4	3.3	3.0	2.7	3.5	9.0	2.9	2.3
AC-FT	4340	6950	3880	764	322	234	188	247	4820	3980	1510	2150

CAL YR 1974 TOTAL 24003.1 MEAN 65.8 MAX 335 MIN 2.9 AC-FT 47610
WTR YR 1975 TOTAL 14822.6 MEAN 40.6 MAX 209 MIN 2.3 AC-FT 29400

11439500 SOUTH FORK AMERICAN RIVER NEAR KYBURZ, CALIF.

LOCATION.--Lat 38°45'49", long 120°19'39", in SW¼SW¼ sec.29, T.11 N., R.15 E., El Dorado County, Eldorado National Forest, on right bank beside U.S. Highway 50, 0.8 mi (1.3 km) downstream from Silver Fork of South Fork, and 1.9 mi (3.1 km) southwest of Kyburz.

DRAINAGE AREA.--193 mi² (500 km²).

PERIOD OF RECORD.--August to December 1907, October 1922 to current year. Prior to October 1956, records for river and El Dorado Canal published separately; combined flow only, October 1956 to September 1960.

GAGE.--Water-stage recorder on river; water-stage recorder for canal diversion. Altitude of gage is 3,840 ft (1,170 m), from topographic map. Prior to Oct. 1, 1962, at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE (River only).--53 years (1922-75), 293 ft³/s (8.298 m³/s), 212,300 acre-ft/yr (262 hm³/yr).
(Combined river and diversion).--53 years (1922-75), 409 ft³/s (11.58 m³/s), 296,300 acre-ft/yr (365 hm³/yr).

EXTREMES (River only).--Current year: Maximum discharge, 4,180 ft³/s (118 m³/s) May 31 (gage height, 7.28 ft or 2.219 m); minimum daily, 3.7 ft³/s (0.10 m³/s) Dec. 15.
Period of record: Maximum discharge, 17,400 ft³/s (493 m³/s) Dec. 23, 1964 (gage height, 10.92 ft or 3.328 m), from rating curve extended above 6,300 ft³/s (178 m³/s) on basis of contracted-opening measurement at gage height 10.40 ft (3.170 m); minimum daily, 0.3 ft³/s (0.008 m³/s) Nov. 9-11, 1928.
(Combined flow).--Current year: Maximum discharge, 4,320 ft³/s (122 m³/s) May 31; minimum daily, 24 ft³/s (0.68 m³/s) Oct. 17.
Period of record: Maximum discharge, 17,500 ft³/s (496 m³/s) Dec. 23, 1964; minimum daily, 10 ft³/s (0.28 m³/s) Oct. 17, 19, 1929.

REMARKS.--Flow at low and medium stages greatly regulated by four reservoirs since beginning of record, total capacity, 37,100 acre-ft (45.7 hm³). See schematic diagram of South Fork American River basin. For records of combined discharge of river and canal, see following page.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1445: 1923(M), 1925(M), 1927(M), 1928 (river only), 1935-37(M). WSP 1515: 1928 (combined). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	7.7	7.4	6.5	7.2	57	146	274	3190	624	21	9.4
2	8.1	7.1	9.7	6.5	7.9	61	113	358	2910	585	19	9.3
3	8.1	7.1	33	6.7	7.3	54	116	498	2770	551	7.4	9.3
4	8.2	8.6	90	7.4	7.2	54	104	378	2750	533	7.1	9.3
5	8.4	7.2	6.3	7.1	7.0	66	104	290	2840	542	10	15
6	8.1	7.1	4.5	27	7.0	70	83	273	2930	552	8.3	30
7	31	9.4	5.0	13	7.4	75	72	358	2650	562	7.5	16
8	32	10	5.0	9.4	7.6	78	60	552	2320	500	10	13
9	32	7.9	5.0	6.6	18	63	50	796	2030	460	7.7	9.7
10	30	7.8	5.8	6.9	9.7	48	50	1060	1950	423	7.6	12
11	29	7.6	5.6	6.9	7.5	36	49	1260	1980	360	7.6	11
12	27	7.6	6.3	6.5	13	25	54	1410	2030	290	7.9	9.6
13	26	7.6	25	6.5	89	24	75	1680	2120	250	8.5	11
14	25	7.6	4.2	6.5	115	19	106	2160	2140	187	11	9.7
15	25	7.6	3.7	6.5	100	15	94	2080	2050	158	10	9.2
16	25	7.6	4.5	6.4	93	18	77	1950	2000	121	9.4	8.8
17	24	7.6	5.4	6.5	57	14	66	2190	1710	132	9.4	8.8
18	15	7.6	5.2	6.5	13	9.5	62	2460	1410	129	61	8.6
19	8.2	7.6	5.5	6.5	9.6	24	72	2500	1190	115	126	8.9
20	6.1	7.6	6.0	6.5	9.6	33	79	1990	1090	101	83	16
21	8.4	34	5.4	6.5	7.4	33	121	1360	981	89	51	9.5
22	8.0	27	5.3	6.5	7.0	41	200	1310	981	73	60	10
23	7.4	8.7	4.0	6.6	6.9	65	224	1650	969	47	22	9.3
24	20	7.4	4.7	6.8	6.9	77	253	2130	996	33	11	9.1
25	28	7.5	6.3	6.6	7.4	419	307	2380	798	23	9.8	8.9
26	8.6	7.4	6.5	6.5	10	259	205	2460	742	11	9.2	8.9
27	7.2	7.4	7.2	6.5	7.0	180	174	2460	718	10	9.1	8.9
28	32	7.4	6.9	7.4	23	130	210	2440	680	8.0	9.2	8.7
29	22	7.4	6.5	6.5	---	105	255	2560	695	33	9.6	30
30	7.4	7.4	6.5	6.9	---	124	310	2630	674	12	9.3	32
31	17	---	6.3	6.8	---	178	---	3030	---	6.3	9.2	---
TOTAL	550.1	277.5	308.7	236.0	668.6	2454.5	3891	48927	52294	7520.3	648.8	369.9
MEAN	17.7	9.25	9.96	7.61	23.9	79.2	130	1578	1743	243	20.9	12.3
MAX	32	34	90	27	115	419	310	3030	3190	624	126	32
MIN	6.1	7.1	3.7	6.4	6.9	9.5	49	273	674	6.3	7.1	8.6
AC-FT	1090	550	612	468	1330	4870	7720	97050	103700	14920	1290	734

CAL YR 1974 TOTAL 150615.9 MEAN 413 MAX 2530 MIN 3.7 AC-FT 298700
WTR YR 1975 TOTAL 118146.4 MEAN 324 MAX 3190 MIN 3.7 AC-FT 234300

Peak discharge (base, 2,000 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-14	2115	6.64	3,130	5-31	2115	7.28	4,180
5-18	2130	6.84	3,440	6-5	2115	7.08	3,830
5-26	2115	6.72	3,250	6-12	2130	6.40	2,780

11439500 SOUTH FORK AMERICAN RIVER NEAR KYBURZ, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF SOUTH FORK AMERICAN RIVER
AND EL DORADO CANAL NEAR KYBURZ, CALIF., WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	164	155	102	78	206	258	403	3330	790	186	172
2	173	160	167	98	69	210	242	489	3060	751	184	170
3	172	155	190	94	73	203	246	630	2910	716	166	170
4	174	173	236	95	74	201	233	506	2890	697	166	166
5	172	169	129	92	78	208	232	619	2980	706	173	177
6	168	173	112	151	78	208	212	405	3070	717	172	195
7	60	173	133	136	82	211	200	491	2790	727	171	181
8	33	177	125	132	100	207	192	686	2460	665	175	176
9	33	171	121	91	148	192	188	929	2170	625	165	152
10	31	164	136	86	146	176	190	1190	2090	588	163	176
11	29	161	137	74	135	166	189	1390	2130	525	169	171
12	27	173	142	73	128	157	194	1540	2180	455	166	167
13	26	170	172	72	138	160	215	1810	2270	415	172	174
14	25	168	115	72	121	158	245	2290	2300	351	176	168
15	25	166	108	72	106	154	232	2210	2210	320	175	165
16	25	168	106	69	99	157	216	2080	2160	284	170	166
17	24	165	98	70	96	150	205	2320	1880	297	167	170
18	35	164	97	75	98	148	202	2590	1580	294	224	168
19	127	164	97	80	112	163	212	2630	1360	280	291	167
20	137	157	94	83	123	171	219	2130	1260	266	248	181
21	167	183	98	84	104	168	258	1500	1150	254	216	169
22	170	179	96	84	107	150	334	1450	1150	236	225	175
23	171	167	82	84	104	162	354	1790	1130	212	187	171
24	165	162	94	86	115	173	377	2270	1160	198	174	167
25	118	160	109	92	126	508	431	2520	964	189	164	172
26	167	152	85	94	137	356	333	2600	90[illegible]	172	154	171
27	165	148	83	73	148	276	303	2600	884	171	165	168
28	190	153	83	69	174	234	339	2580	846	164	167	156
29	175	148	77	76	---	219	384	2700	861	196	175	49
30	153	159	77	71	---	238	439	2770	840	177	170	33
31	179	---	89	74	---	292	---	3170	---	161	169	---
TOTAL	3484	4946	3643	2704	3089	6382	7874	53088	56973	12599	5645	4863
MEAN	112	165	118	87.2	110	206	262	1713	1899	406	182	162
MAX	190	183	236	151	174	508	439	3170	3330	790	291	195
MIN	24	148	77	69	69	148	188	403	840	161	154	33
AC-FT	6910	9810	7230	5360	6130	12660	15620	105300	113000	24990	11200	9650

CAL YR 1974 TOTAL 202705 MEAN 555 MAX 2680 MIN 24 AC-FT 402100
WTR YR 1975 TOTAL 165298 MEAN 453 MAX 3330 MIN 24 AC-FT 327900

11439500 SOUTH FORK AMERICAN RIVER NEAR KYBURZ, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: August 1966 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 23.5°C July 28; minimum, freezing point on several days during January to April.
Period of record:
Water temperatures: Maximum (1967-69, 1970 to current year), 25.0°C July 16-18, 1972; minimum, freezing point on many days in most years.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	10.5	8.0	7.0	2.0	1.0	0.5	0.0	0.0	-0.5	2.0	0.0
2	14.0	11.5	7.0	5.5	3.5	2.0	0.5	0.0	-0.5	-0.5	3.0	1.0
3	14.0	11.5	6.5	5.0	4.5	3.5	1.0	0.0	-0.5	-0.5	2.5	0.0
4	13.0	11.5	6.5	4.5	4.0	2.0	0.5	0.0	-0.5	-0.5	3.0	0.5
5	11.5	9.0	6.0	4.5	3.0	1.5	0.5	0.0	-0.5	-0.5	2.0	1.5
6	11.5	9.0	6.0	4.0	3.0	2.0	1.5	0.5	-0.5	-0.5	3.0	1.0
7	11.0	8.5	6.5	5.0	2.0	1.5	2.5	1.5	-0.5	-0.5	2.0	0.0
8	11.5	9.5	5.5	4.5	2.0	1.5	2.5	0.5	0.0	-0.5	2.5	0.5
9	11.5	9.5	5.0	4.0	1.5	1.0	1.0	0.0	0.0	-0.5	2.5	1.5
10	11.5	8.5	5.0	3.5	2.0	1.0	2.0	0.5	0.5	-0.5	2.5	1.0
11	11.5	8.5	5.5	4.0	3.5	2.0	1.5	0.5	0.5	-0.5	4.0	1.5
12	11.5	8.0	6.0	4.0	4.5	3.5	0.5	0.0	-0.5	-0.5	3.5	0.5
13	10.5	7.5	6.5	5.0	4.0	2.5	0.5	0.0	0.5	-0.5	2.0	0.0
14	10.5	7.0	6.5	5.0	3.5	2.5	0.5	0.0	0.5	-0.5	3.0	-0.5
15	10.5	7.5	6.5	5.0	3.5	2.5	1.0	0.0	0.0	-0.5	4.0	0.5
16	10.5	7.5	7.0	5.0	3.0	2.0	1.0	0.0	0.0	-0.5	2.0	-0.5
17	10.5	7.5	6.5	5.0	2.5	2.0	1.5	0.0	0.0	-0.5	1.5	-0.5
18	10.5	7.5	6.5	5.0	2.0	1.0	1.5	0.5	0.0	-0.5	4.5	1.0
19	11.0	8.5	6.0	4.0	2.0	1.0	1.5	0.5	0.5	-0.5	4.0	1.5
20	10.5	8.5	5.0	3.5	2.5	1.0	1.5	0.5	1.0	-0.5	3.5	1.5
21	10.5	8.0	6.0	4.5	3.0	1.5	2.0	0.5	1.0	-0.5	2.0	-0.5
22	9.5	8.0	4.5	3.0	2.5	1.0	1.5	1.0	0.5	-0.5	-0.5	-0.5
23	9.0	7.0	3.0	2.0	1.0	0.5	2.0	1.0	1.5	-0.5	1.5	-0.5
24	9.0	7.0	3.0	2.5	1.0	0.5	2.0	1.0	2.0	-0.5	1.5	0.5
25	9.5	8.0	3.5	2.5	1.0	0.5	2.0	1.0	2.5	-0.5	1.0	0.0
26	10.0	8.0	3.0	2.0	0.5	0.5	1.5	0.5	2.5	-0.5	2.0	-0.5
27	10.5	9.0	2.5	2.0	1.0	0.5	1.0	-0.5	3.5	1.0	2.0	-0.5
28	9.5	7.0	3.0	1.5	1.5	0.5	-0.5	-0.5	3.0	0.0	2.0	-0.5
29	7.5	6.5	2.5	1.5	0.5	0.0	1.5	-0.5	---	---	3.5	-0.5
30	7.5	6.5	2.0	1.5	0.5	0.0	1.5	-0.5	---	---	5.0	1.0
31	7.5	7.0	---	---	0.5	0.0	1.0	0.0	---	---	4.0	2.0
MONTH	14.0	6.5	8.0	1.5	4.5	0.0	2.5	-0.5	3.5	-0.5	5.0	-0.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.5	0.5	6.5	3.0	8.5	5.0	11.5	8.0	19.5	14.5	17.5	12.5
2	4.5	1.0	7.0	3.5	8.5	4.5	11.5	8.5	20.5	16.0	17.5	12.0
3	2.5	1.5	5.0	3.0	9.0	4.5	12.0	9.0	22.0	15.5	18.0	12.5
4	2.0	0.0	3.5	2.0	9.0	5.0	13.0	9.5	22.0	16.0	18.5	13.0
5	0.0	-0.5	6.0	2.0	9.5	5.0	13.5	10.5	21.0	16.0	18.5	13.5
6	1.0	-0.5	8.5	4.0	9.5	5.0	14.5	11.5	21.0	16.5	19.0	14.0
7	1.5	-0.5	8.5	5.0	9.5	5.0	14.5	11.5	20.0	14.5	19.0	14.5
8	2.5	0.0	8.5	4.5	9.5	5.5	15.0	11.5	20.0	14.5	19.0	15.0
9	5.0	0.0	8.0	4.0	9.5	5.5	14.5	13.0	20.5	15.0	19.0	15.5
10	4.0	1.5	8.0	4.0	10.0	5.5	14.5	13.0	19.5	15.0	17.5	15.0
11	6.0	1.5	8.5	4.0	10.5	6.5	16.5	13.5	20.5	15.0	17.0	13.0
12	6.5	2.0	8.5	4.5	10.5	6.5	16.5	14.0	21.0	15.0	17.5	13.5
13	6.0	2.5	8.5	4.5	10.5	6.5	16.0	13.0	20.5	15.0	17.5	13.5
14	4.0	1.5	8.0	4.5	11.0	6.5	17.0	14.0	19.5	15.0	17.5	13.5
15	3.0	0.5	7.5	4.5	11.0	6.5	15.5	13.5	20.0	15.0	18.0	13.5
16	1.5	1.0	8.5	4.5	11.0	7.5	16.5	13.5	20.0	15.0	17.5	13.5
17	5.0	0.5	8.5	5.0	9.5	7.0	17.0	14.5	19.5	14.5	17.5	14.5
18	6.0	2.0	9.0	4.5	8.5	6.0	18.0	15.0	15.5	13.5	18.5	15.0
19	6.0	3.5	7.5	4.5	8.5	6.5	18.5	14.5	14.0	12.5	18.5	14.5
20	6.0	2.5	5.0	3.5	9.5	6.5	19.0	15.5	15.0	12.0	18.0	14.5
21	7.0	3.5	6.5	4.0	11.0	7.0	19.0	15.5	13.5	12.5	17.0	14.0
22	6.0	2.5	8.0	4.5	11.5	7.5	19.0	15.0	15.0	11.5	17.0	13.0
23	4.5	3.0	8.5	4.5	10.5	8.0	19.5	15.5	17.5	13.0	16.5	13.0
24	4.0	2.5	8.5	4.5	9.5	6.0	20.0	15.5	18.5	13.5	16.0	12.5
25	2.5	1.5	8.5	4.0	9.5	5.0	21.5	16.5	19.5	14.5	16.0	12.0
26	3.5	1.0	8.0	4.5	10.5	7.0	23.0	17.5	20.0	15.0	15.5	12.0
27	6.5	2.5	8.5	4.0	10.5	7.5	23.0	17.5	18.5	14.0	15.0	11.5
28	7.0	3.0	8.0	4.5	11.5	8.0	23.5	17.5	17.0	13.5	14.5	11.0
29	7.0	3.0	8.0	4.5	11.5	8.5	20.5	17.0	17.5	12.5	14.0	10.5
30	4.5	3.5	9.0	4.0	11.5	8.5	20.0	16.0	17.5	12.0	14.0	10.5
31	---	---	9.0	4.5	---	---	20.5	14.0	17.5	12.5	---	---
MONTH	7.0	-0.5	9.0	2.0	11.5	4.5	23.5	8.0	22.0	11.5	19.0	10.5

11440000 ALDER CREEK NEAR WHITE HALL, CALIF.

LOCATION.--Lat 38°45'19", long 120°22'17", in NE¼SE¼ sec.35, T.11 N., R.14 E., El Dorado County, Eldorado National Forest, on right bank 0.9 mi (1.4 km) upstream from mouth, and 2.2 mi (3.5 km) southeast of White Hall.

DRAINAGE AREA.--22.1 mi^2 (57.2 km^2).

PERIOD OF RECORD.--October 1922 to current year (includes diversions by pipeline).

GAGE.--Water-stage recorder. Broad-crested weir with V-notch since Aug. 28, 1964. Altitude of gage is 3,840 ft (1,170 m), from topographic map. Prior to July 23, 1924, nonrecording gage at same site and datum.

AVERAGE DISCHARGE (including diversions by pipeline).--53 years, 38.0 ft^3/s (1.076 m^3/s), 27,530 acre-ft/yr (33.9 hm^3/yr).

EXTREMES (Creek only).--Current year: Maximum discharge, 363 ft^3/s (10.3 m^3/s) May 14 (gage height, 3.79 ft or 1.155 m); minimum daily, 0.01 ft^3/s (<0.001 m^3/s) Jan. 3.

Period of record: Maximum discharge, 5,500 ft^3/s (156 m^3/s) Dec. 23, 1955 (gage height, 8.40 ft or 2.560 m, from floodmarks), from rating curve extended above 600 ft^3/s (17.0 m^3/s); no flow at times in several years.

REMARKS.--Records include flow diverted 1,300 ft (396 m) above station by pipeline into El Dorado Canal from Oct. 2-7, Oct. 18 to June 13.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1215: 1928(M). WSP 1445: 1925(M), 1929, 1935-36(M), 1938(M), 1940-43(M), 1945(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	3.1	3.0	6.2	11	55	82	122	187	13	4.7	2.8
2	2.4	3.1	3.0	5.8	11	59	80	139	168	13	4.5	2.8
3	1.7	3.0	14	5.3	11	60	79	167	145	12	4.5	2.8
4	1.7	3.0	34	6.2	11	60	74	161	130	11	4.2	2.5
5	1.7	3.0	16	6.2	11	64	68	134	121	11	3.7	2.5
6	1.7	3.0	13	19	11	67	62	124	113	11	3.7	2.5
7	2.5	3.0	10	23	11	78	55	134	102	10	3.7	2.5
8	2.0	3.0	9.7	34	12	84	51	161	88	9.7	3.5	2.5
9	2.5	3.0	9.2	24	28	74	48	195	76	9.5	2.8	2.5
10	2.4	3.0	8.3	20	31	63	46	227	67	9.1	2.8	2.5
11	2.1	3.0	8.5	16	30	55	45	250	62	9.0	2.8	2.5
12	2.1	3.0	13	15	28	49	46	269	56	8.6	2.8	2.5
13	2.1	3.0	10	15	42	48	51	293	52	8.2	2.8	2.5
14	2.1	3.0	8.5	15	45	44	57	320	40	8.1	2.8	2.5
15	2.1	3.1	8.5	15	35	42	56	303	40	8.0	2.8	2.4
16	2.1	3.1	8.4	15	30	42	52	281	35	8.2	2.7	2.3
17	2.3	3.1	8.4	15	27	37	50	290	31	8.1	2.5	2.4
18	2.7	3.1	7.3	15	25	37	49	313	29	7.8	5.5	2.5
19	1.8	3.1	6.9	15	30	42	51	306	27	7.7	8.8	2.4
20	1.8	3.1	7.3	15	37	46	54	259	26	7.3	7.4	2.4
21	1.8	14	7.3	15	30	44	63	198	23	7.2	7.1	2.3
22	1.8	11	7.1	15	28	43	77	177	21	6.9	7.6	2.1
23	1.8	6.0	6.3	14	28	43	84	180	19	6.5	6.4	2.1
24	1.8	5.4	6.3	14	29	49	114	198	22	6.4	5.3	2.1
25	1.8	5.4	5.9	14	31	203	150	208	20	5.9	4.9	2.1
26	1.8	4.6	5.0	13	34	133	118	211	18	5.8	4.5	2.1
27	1.8	4.2	5.0	9.5	38	104	105	203	16	5.2	3.8	2.1
28	7.4	3.6	5.0	8.8	46	86	106	198	15	5.2	3.7	2.1
29	4.6	3.6	5.0	8.7	---	78	114	195	14	5.2	3.7	2.1
30	4.6	3.0	5.3	8.5	---	81	124	185	13	5.2	3.4	2.1
31	3.7	---	5.3	14	---	87	---	185	---	5.1	2.8	---
TOTAL	74.1	121.6	270.5	435.2	741	2057	2211	6586	1776	254.9	132.2	71.5
MEAN	2.39	4.05	8.73	14.0	26.5	66.4	73.7	212	59.2	8.22	4.26	2.38
MAX	7.4	14	34	34	46	203	150	320	187	13	8.8	2.8
MIN	1.4	3.0	3.0	5.3	11	37	45	122	13	5.1	2.5	2.1
AC-FT	147	241	537	863	1470	4080	4390	13060	3520	506	262	142

CAL YR 1974 TOTAL 17953.3 MEAN 49.2 MAX 390 MIN 1.4 AC-FT 35610
WTR YR 1975 TOTAL 14731.0 MEAN 40.4 MAX 320 MIN 1.4 AC-FT 29220

Peak discharge (base, 170 ft^3/s, creek only)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
3-25	0445	3.47	254	5-14	1945	3.79	363
4-24	2100	3.22	184	5-18	2000	3.77	355
5-3	1845	3.17	171	5-25	2100	3.39	230

11441001 UNION VALLEY RESERVOIR NEAR RIVERTON, CALIF.

LOCATION.--Lat 38°51'49", long 120°26'15", in NW¼NW¼ sec.29, T.12 N., R.14 E., El Dorado County, Eldorado National Forest, in valve control house near left bank at Union Valley Dam on Silver Creek, 0.7 mi (1.1 km) upstream from Little Silver Creek, and 6.6 mi (10.6 km) north of Riverton.

DRAINAGE AREA.--83.6 mi^2 (216.5 km^2).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Sacramento Municipal Utility District).

EXTREMES.--Current year: Maximum contents, 237,800 acre-ft (293 hm^3) June 30 (elevation, 4,857.6 ft or 1,480.60 m); minimum, 58,200 acre-ft (71.8 hm^3) Jan. 31 (elevation, 4,752.4 ft or 1,448.53 m).
Period of record: Maximum contents, 272,600 acre-ft (336 hm^3) July 9, 1974 (elevation, 4,870.6 ft or 1,484.56 m); minimum since reservoir first filled, 58,200 acre-ft (71.8 hm^3) Jan. 31, 1975 (elevation, 4,752.4 ft or 1,448.53 m).

REMARKS.--Reservoir is formed by earthfill dam completed in December 1962. Storage began in May 1962. Usable capacity, 264,000 acre-ft (326 hm^3) between elevations 4,645.0 ft (1,415.80 m), minimum operating level and 4,870.0 ft (1,484.38 m), top of radial spillway gates, above mean sea level. Dead storage, 7,000 acre-ft (8.63 hm^3). Reservoir receives water from the South Fork Rubicon River via Robbs Peak powerplant (see sta 11429800). Water is used for power development in the South Fork American River basin. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Middle Fork American and Rubicon River basins and South Fork American River basin.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,700	25,000	4,800	117,000
4,720	35,000	4,820	153,000
4,740	48,000	4,840	196,000
4,760	65,000	4,870	271,000
4,780	88,000		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158500	150500	142200	103400	58300	70800	102000	110000	187600	237500	210300	176000
2	157400	150500	140900	101400	58400	71600	103500	109800	190500	237000	209000	174900
3	156600	150500	140200	99600	58200	72200	104600	110400	193100	236500	208500	173800
4	155900	150500	139700	98100	58500	72700	105800	110700	196200	237000	207200	172700
5	155100	150500	138600	98100	58900	73200	107000	110600	199300	236500	205700	171900
6	154700	150700	137300	97000	59100	74200	107700	109500	203000	237000	204100	170800
7	153800	150800	135700	96000	59400	75300	108400	110100	205900	236500	202600	169600
8	152800	150800	135700	95600	59900	76400	108400	111200	208500	235400	201100	168500
9	152100	150800	134600	94000	60800	77100	108300	112500	211000	234600	199700	167500
10	151200	150800	133200	92100	61400	77900	108300	114600	213200	233900	199300	166600
11	150500	151000	131900	90000	61700	78600	107800	116600	215600	233100	198000	165400
12	159800	151000	130900	90100	62000	78900	107200	118300	217600	232800	196400	163700
13	159600	151200	129400	88800	62800	79600	107800	123500	219600	232800	194900	162000
14	159600	151200	128200	86700	63600	80300	108000	127800	220600	232000	193100	161000
15	159600	151200	128200	84800	64000	81500	107800	131400	221600	231500	191600	160100
16	149600	151200	126200	83200	64500	82000	107200	134500	223200	230500	190100	158700
17	149600	151200	124200	81000	64600	82800	107000	138400	224000	229200	189800	157600
18	149600	151400	122400	79100	65300	83800	106400	142600	224500	227900	189000	156400
19	149600	151400	120600	78900	65800	84500	106000	146200	225300	226600	188500	155100
20	149600	151600	120100	77300	66500	85200	106800	149000	226300	226600	188100	153600
21	149600	150500	116200	74900	67200	86200	106400	151200	227400	225300	187200	153600
22	149600	149000	116200	73100	67600	87000	107800	153600	229200	224000	186500	152500
23	149600	148000	114400	71400	68100	87600	107800	157000	230200	222700	185400	151400
24	149600	148100	112600	69300	68500	88600	108200	160600	231300	221100	184600	150300
25	149600	146700	112600	67300	68700	91600	109200	164100	232600	219600	183500	149200
26	149800	145400	110700	66200	69200	93700	109400	167700	233900	217300	182600	148100
27	149800	144400	109000	65400	69500	95800	109600	170600	234900	216900	181500	146900
28	150100	144400	107100	63600	70300	97100	110100	174000	235900	215600	180400	146900
29	150300	143300	107100	61800	---	98200	110400	177500	237000	214000	179300	145800
30	150300	142200	105200	59800	---	99200	111200	180800	237800	212700	178200	144700
31	150500	---	103400	58200	---	100600	---	184600	---	211400	177100	---
MAX	159800	151600	142200	103400	70300	100600	111200	184600	237800	237500	210300	176000
MIN	149600	142200	103400	58200	58200	70800	102000	109500	187600	211400	177100	144700
(a)	4,818.6	4,814.0	4,790.9	4,752.4	4,764.8	4,789.0	4,796.1	4,334.8	4,857.6	4,847.0	4,831.4	4,815.4
(b)	-8,800	-8,300	-38,800	-45,200	+12,100	+30,300	+10,600	+73,400	+53,200	-26,400	-34,300	-32,400

CAL YR 1974 b -96,600
WTR YR 1975 b -14,600

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11441100 ICE HOUSE RESERVOIR NEAR KYBURZ, CALIF.

LOCATION.--Lat 38°49'26", long 120°21'34", in SE¼SW¼ sec.1, T.11 N., R.14 E., El Dorado County, Eldorado National Forest, on left bank at Ice House Dam on South Fork Silver Creek, 0.5 mi (0.8 km) upstream from Peavine Creek, and 4.8 mi (7.7 km) northwest of Kyburz.

DRAINAGE AREA.--27.2 mi² (70.4 km²).

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Sacramento Municipal Utility District).

EXTREMES.--Current year: Maximum contents, 43,900 acre-ft (54.1 hm³) Oct. 1 (elevation, 5,447.1 ft or 1,660.28 m); minimum, 12,500 acre-ft (15.4 hm³) Nov. 20-23 (elevation, 5,387.4 ft or 1,642.08 m).
Period of record: Maximum contents, 46,400 acre-ft (57.2 hm³) June 27, 1971 (elevation, 5,450.6 ft or 1,661.34 m); minimum since reservoir first filled, 1,740 acre-ft (2.15 hm³) Oct. 5-9, 1962 (elevation, 5,349.85 ft or 1,630.634 m).

REMARKS.--Reservoir is formed by earthfill dam. Storage began Dec. 15, 1959. Usable capacity, 45,800 acre-ft (56.5 hm³) between elevations 5,327.5 ft (1,623.82 m), centerline of fishwater outlet, and 5,450.0 ft (1,661.16 m), top of spillway gates. Dead storage, 160 acre-ft (197,000 m³). Reservoir is used to store water for power development. Records, including, extremes, represent total contents at 2400 hours. See schematic diagram of South Fork American River basin.

REVISIONS (WATER YEARS).--WSP 1931, WRD Calif. 1967: 1960. WRD Calif. 1970: 1969.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,349	1,600	5,400	17,600
5,350	1,760	5,420	27,400
5,360	3,840	5,450	46,000
5,380	9,600		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43900	27400	12700	13300	14400	15700	18000	20700	31100	39200	42400	42500
2	43800	26600	12700	13300	14500	15700	18100	20600	31900	39400	42400	42500
3	43700	25800	12800	13300	14500	15800	18100	20300	32600	39600	42400	42500
4	43700	25000	12800	13300	14600	15800	18200	20000	33500	39900	42400	42500
5	43700	24100	12800	13300	14600	15900	18400	19800	34300	40100	42400	42500
6	43700	23200	12900	13500	14700	15900	18500	19600	35200	40400	42400	42500
7	43700	22400	12900	13600	14700	16100	18500	19400	35900	40600	42400	42500
8	43600	21400	12900	13700	14800	16100	18600	19200	36500	40700	42400	42400
9	43600	20500	12900	13700	14900	16100	18700	19100	37000	40900	42400	42400
10	43600	19600	12900	13800	15000	16200	18700	19100	37500	41100	42400	42400
11	43600	18700	12900	13800	15000	16300	18800	19100	38000	41200	42400	42400
12	43500	17900	13000	13900	15000	16300	18900	19400	38500	41300	42400	42400
13	43500	17100	13000	13900	15100	16300	19000	19800	39000	41500	42300	42300
14	43000	16300	13000	13900	15200	16400	19000	20400	39400	41500	42300	42300
15	42000	15700	13000	13900	15200	16500	19100	21000	39700	41500	42300	42000
16	41100	15100	13100	13900	15200	16500	19100	21400	39900	41700	42200	41500
17	40200	14600	13100	14000	15300	16600	19200	22000	39900	41800	42200	41100
18	39100	13800	13100	14000	15300	16600	19300	22800	39800	41900	42200	40600
19	38200	13500	13100	14000	15300	16700	19400	23400	39600	42000	42300	40100
20	37300	12500	13200	14100	15400	16700	19400	23800	39500	42000	42400	39600
21	36400	12500	13200	14100	15400	16800	19500	24000	39400	42100	42400	39100
22	35400	12500	13200	14100	15500	16900	19600	24100	39300	42200	42500	38700
23	34500	12500	13200	14100	15500	17000	19700	24400	39200	42200	42600	38100
24	33600	12600	13200	14200	15500	17200	19800	25000	39000	42300	42600	37700
25	32700	12600	13200	14200	15500	17300	20000	25600	38900	42400	42600	37200
26	31700	12600	13200	14200	15600	17400	20000	26200	38900	42400	42600	36700
27	30800	12600	13200	14200	15600	17500	20200	26900	38900	42400	42600	36300
28	30600	12600	13200	14300	15700	17600	20300	27600	39000	42400	42500	35700
29	30000	12700	13300	14300	---	17700	20400	28400	39100	42300	42500	35200
30	29100	12700	13200	14300	---	17800	20500	29200	39100	42300	42500	34800
31	28200	---	13300	14300	---	17900	---	30100	---	42400	42500	---
MAX	43900	27400	13300	14300	15700	17900	20500	30100	39900	42400	42600	42500
MIN	28200	12500	12700	13300	14400	15700	18000	19100	31100	39200	42200	34800
(a)	5,421.7	5,387.9	5,389.4	5,392.1	5,395.4	5,400.6	5,406.2	5,425.1	5,439.7	5,444.8	5,445.0	5,433.1
(b)	-15,700	-15,500	+600	+1,000	+1,400	+2,200	+2,600	+9,600	+9,000	+3,300	+100	-7,700

CAL YR 1974 b -15,700
WTR YR 1975 b -9,100

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11441500 SOUTH FORK SILVER CREEK NEAR ICE HOUSE, CALIF.

LOCATION.--Lat 38°49'08", long 120°21'51", in NW¼NW¼ sec.12, T.11 N., R.14 E., El Dorado County, Eldorado National Forest, on right bank 300 ft (91 m) upstream from Peavine Creek, 0.4 mi (0.6 km) downstream from Ice House Dam, and 4.8 mi (7.7 km) northwest of Kyburz.

DRAINAGE AREA.--27.5 mi² (71.2 km²).

PERIOD OF RECORD.--October 1924 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,290 ft (1,612 m), from topographic map. Prior to Oct. 1, 1959, at site 0.3 mi (0.5 km) upstream at different datum.

AVERAGE DISCHARGE (adjusted for change in contents in Ice House Reservoir).--51 years, 75.7 ft³/s (2.144 m³/s), 54,840 acre-ft/yr (67.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 476 ft³/s (13.5 m³/s) Oct. 14 (gage height, 4.47 ft or 1.362 m); minimum daily, 4.2 ft³/s (0.119 m³/s) Jan. 12.

Period of record: Maximum discharge, 3,940 ft³/s (112 m³/s) Dec. 23, 1955 (gage height, 6.71 ft or 2.045 m, site and datum then in use), from rating curve extended above 540 ft³/s (15.3 m³/s) on basis of slope-area measurement at gage height 6.69 ft (2.039 m); no flow Oct. 31 to Nov. 9, 1958. Maximum discharge since construction of Ice House Dam in 1959, 1,800 ft³/s (51.0 m³/s) Jan. 22, 1970 (gage height, 5.66 ft or 1.725 m), from rating curve extended above 620 ft³/s (17.6 m³/s) on basis of computation of flow over dam of peak flow; minimum daily, 1.2 ft³/s (0.03 m³/s) Mar. 17-19, 1960.

REMARKS.--Records good. Flow regulated by Ice House Reservoir beginning in December 1959 (see sta 11441100). See schematic diagram of South Fork American River basin.

REVISIONS (WATER YEARS).--WSP 1395: 1928, 1938. WSP 1635: Drainage area at former site.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	448	4.7	4.7	5.2	6.2	5.2	6.6	197	54	10	10
2	10	425	5.9	4.5	5.2	6.4	5.2	126	220	9.2	10	10
3	10	425	7.8	4.5	5.4	5.6	5.2	204	247	9.5	11	10
4	10	446	7.8	4.7	5.4	4.9	5.2	204	248	9.7	11	10
5	10	458	6.9	4.5	5.4	4.9	5.2	201	250	9.7	11	10
6	10	452	6.4	6.9	5.4	5.2	5.2	201	252	9.7	10	10
7	10	452	5.9	5.6	5.4	5.6	4.9	201	252	9.7	9.7	10
8	10	452	5.9	5.9	5.9	5.4	4.9	201	253	9.7	10	10
9	10	452	5.9	4.7	6.6	5.2	4.9	197	255	10	11	9.7
10	10	446	5.9	4.5	6.6	5.2	4.9	195	256	9.8	11	10
11	10	440	6.2	4.5	6.4	4.9	4.9	195	256	10	10	9.5
12	10	420	6.6	4.2	6.4	4.7	5.2	195	256	10	10	9.3
13	10	400	6.4	4.7	6.9	4.9	5.6	196	257	10	10	9.4
14	250	395	6.2	5.2	6.9	4.9	5.2	197	259	10	11	9.4
15	476	345	6.2	5.2	6.4	5.2	5.2	198	260	10	9.7	154
16	470	313	6.2	5.2	5.9	5.4	5.2	195	260	11	9.7	243
17	470	309	5.9	5.2	5.6	4.9	5.2	197	260	11	9.7	242
18	452	372	5.4	5.4	5.4	5.2	5.2	197	257	10	10	242
19	430	425	5.4	5.4	5.9	5.6	5.2	200	252	11	10	242
20	430	289	5.4	5.4	5.9	5.6	5.4	201	252	11	9.8	240
21	430	8.1	5.6	5.4	5.6	5.9	5.6	201	252	9.8	9.9	239
22	430	5.6	5.4	5.2	5.4	6.4	5.6	201	252	9.8	10	239
23	440	5.4	5.2	5.2	5.4	5.9	5.9	200	252	9.7	10	239
24	452	5.4	5.2	5.4	5.4	6.9	6.9	201	252	9.7	9.8	237
25	452	5.4	5.2	5.6	5.6	8.1	6.6	205	252	9.7	9.7	236
26	446	5.4	5.2	5.6	5.6	5.6	6.6	207	174	9.7	9.7	235
27	440	5.4	5.2	5.6	5.6	5.2	6.6	210	125	9.7	9.9	235
28	167	5.4	5.2	5.6	5.9	4.9	6.6	210	125	9.7	10	235
29	306	5.2	5.2	5.6	---	5.2	6.6	213	125	9.7	10	238
30	464	4.7	4.9	5.4	---	5.2	6.6	199	125	10	10	242
31	464	---	4.9	5.4	---	5.2	---	192	---	10	10	---
TOTAL	7599	8212.0	180.2	160.9	162.7	170.4	166.7	5946.6	6933	352.5	313.6	3875.3
MEAN	245	274	5.81	5.19	5.81	5.50	5.56	192	231	11.4	10.1	129
MAX	476	458	7.8	6.9	6.9	8.1	6.9	213	260	54	11	243
MIN	10	4.7	4.7	4.2	5.2	4.7	4.9	6.6	125	9.2	9.7	9.3
AC-FT	15070	16290	357	319	323	338	331	11800	13750	699	622	7690

CAL YR 1974 TOTAL 42198.7 MEAN 116 MAX 570 MIN 4.7 AC-FT 83700 MEAN a 93.9 AC-FT a 68,010
WTR YR 1975 TOTAL 34072.9 MEAN 93.4 MAX 476 MIN 4.2 AC-FT 67580 MEAN a 80.8 AC-FT a 58,480

a Adjusted for change in contents in Ice House Reservoir.

11441900 SILVER CREEK BELOW CAMINO DIVERSION DAM, CALIF.

LOCATION.--Lat 38°49'26", long 120°32'18", on line between secs.4 and 5, T.11 N., R.13 E., El Dorado County, Eldorado National Forest, on right bank 300 ft (91 m) downstream from Round Tent Canyon, 0.4 mi (0.6 km) downstream from diversion dam, and 5 mi (8 km) northeast of Pollock Pines.

DRAINAGE AREA.--171 mi² (443 km²).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,754.06 ft (839.438 m) above mean sea level (Sacramento Municipal Utility District bench mark).

AVERAGE DISCHARGE (unadjusted).--15 years, 99.0 ft³/s (2.804 m³/s), 71,730 acre-ft/yr (88.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 162 ft³/s (4.59 m³/s) Mar. 24 (gage height, 3.65 ft or 1.113 m); minimum daily, 9.4 ft³/s (0.27 m³/s) Nov. 9.

Period of record: Maximum discharge, 19,300 ft³/s (547 m³/s) Jan. 31, 1963 (gage height, 11.28 ft or 3.438 m in gage well, 11.9 ft or 3.63 m, from floodmarks), from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of slope-area measurement of maximum flow; minimum daily, 4.6 ft³/s (0.13 m³/s) July 1, 1964.

REMARKS.--Records good. Flow regulated by storage, diversions, and powerplants. Records not adjusted for diversions or changes in storage. See schematic diagram of South Fork American River basin.

REVISIONS (WATER YEARS).--WRD Calif. 1965: 1962(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	24	9.7	9.9	13	25	28	32	20	22	20	20
2	23	24	9.7	9.7	12	25	27	32	20	22	20	20
3	23	23	10	9.7	13	24	26	37	20	21	20	21
4	23	23	12	9.9	12	24	25	36	20	21	20	20
5	23	16	11	9.8	12	25	24	33	20	21	20	21
6	23	9.5	10	19	12	28	23	31	20	21	20	21
7	23	9.7	10	19	14	38	22	30	20	21	20	21
8	23	9.6	10	32	48	37	21	29	21	22	20	21
9	22	9.4	10	20	42	33	22	28	21	22	20	22
10	22	9.6	10	17	29	30	22	28	21	22	19	22
11	23	10	10	15	24	27	23	27	21	22	19	21
12	23	10	10	14	36	25	26	27	21	21	19	21
13	23	9.9	10	14	37	24	27	26	21	21	19	21
14	23	9.9	10	14	29	23	26	25	22	21	19	21
15	23	9.8	10	13	25	24	25	24	22	21	19	22
16	23	9.7	10	13	22	22	24	23	22	21	19	23
17	23	9.7	10	13	21	22	24	22	22	21	20	23
18	23	10	10	12	24	25	24	21	22	21	20	23
19	23	9.7	10	12	37	28	25	20	23	21	20	23
20	23	9.7	10	12	29	27	27	19	23	21	20	23
21	23	11	10	12	26	27	28	19	23	21	20	23
22	23	11	10	12	24	25	29	18	23	20	20	23
23	23	10	9.9	11	23	30	41	21	23	20	20	23
24	23	9.9	9.8	11	22	121	53	20	23	20	20	23
25	23	10	9.8	11	22	79	46	20	22	20	20	23
26	23	9.8	9.7	11	22	55	40	20	22	20	20	23
27	23	9.8	9.8	11	23	43	36	21	22	20	20	23
28	25	9.9	9.9	11	24	36	36	21	22	20	20	23
29	24	9.9	9.7	11	---	34	34	21	22	20	20	23
30	24	9.8	9.8	11	---	32	32	21	22	20	20	22
31	24	---	9.9	12	---	30	---	21	---	20	20	---
TOTAL	716	357.3	310.7	412.0	677	1048	866	773	646	647	613	659
MEAN	23.1	11.9	10.0	13.3	24.2	33.8	28.9	24.9	21.5	20.9	19.8	22.0
MAX	25	24	12	32	48	121	53	37	23	22	20	23
MIN	22	9.4	9.7	9.7	12	22	21	18	20	20	19	20
AC-FT	1420	709	616	817	1340	2080	1720	1530	1280	1280	1220	1310

CAL YR 1974 TOTAL 39190.4 MEAN 107 MAX 1680 MIN 7.5 AC-FT 77730
WTR YR 1975 TOTAL 7725.0 MEAN 21.2 MAX 121 MIN 9.4 AC-FT 15320

11442500 SOUTH FORK AMERICAN RIVER BELOW SILVER CREEK, NEAR POLLOCK PINES, CALIF.

LOCATION.--Lat 38°47'37", long 120°37'02", in NE¼NE¼ sec.22, T.11 N., R.12 E., El Dorado County, Eldorado National Forest, on right bank 350 ft (107 m) upstream from El Dorado powerhouse, 2.4 mi (3.9 km) downstream from Silver Creek, and 2.8 mi (4.5 km) northwest of Pollock Pines.

DRAINAGE AREA.--449 mi² (1,163 km²).

PERIOD OF RECORD.--August to December 1923 (published as "below Silver Creek"), November 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,862.79 ft (567.778 m) above mean sea level. Aug. 11 to Dec. 16, 1923, nonrecording gage at same site at different datum.

AVERAGE DISCHARGE (unadjusted).--[illegible] years, 480 ft³/s (13.59 m³/s), 347,800 acre-ft/yr (42.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,230 ft³/s (120 m³/s) May 31 (gage height, 10.37 ft or 3.161 m); minimum daily, 25 ft³/s (0.71 m³/s) Dec. 24.

Period of record: Maximum discharge, 22,200 ft³/s (629 m³/s) Jan. 21, 1970 (gage height, 15.22 ft or 4.639 m); minimum daily, 21 ft³/s (0.59 m³/s) Nov. 4, 1973.

REMARKS.--Records good. Flow regulated by storage, diversions, and powerplants. See schematic diagram of South Fork American River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	60	33	35	58	224	556	692	3260	745	59	50
2	46	48	32	31	130	256	462	745	3010	713	68	50
3	45	43	54	36	97	249	448	967	2830	678	65	50
4	45	43	278	67	122	234	433	884	2790	649	50	49
5	46	43	129	44	98	243	424	723	2860	652	48	47
6	46	31	60	155	79	272	384	660	2960	667	52	62
7	50	33	48	191	85	333	345	709	2730	680	51	66
8	74	52	42	301	126	510	321	893	2430	632	49	56
9	71	42	39	172	618	426	296	1130	2130	584	52	53
10	69	35	35	117	501	332	315	1300	2030	551	48	56
11	67	33	33	95	258	276	316	1630	2020	496	46	53
12	65	32	35	80	182	231	349	1780	2070	414	48	52
13	62	32	52	72	415	220	389	2030	2180	375	46	48
14	61	32	54	67	454	208	448	2490	2190	302	48	50
15	61	32	36	63	321	205	445	2580	2110	260	52	48
16	60	31	33	60	272	235	399	2260	2080	229	51	48
17	59	31	32	56	226	196	357	2460	1860	212	48	48
18	57	34	32	54	140	180	356	2750	1520	224	61	48
19	49	34	32	52	169	219	354	2880	1260	207	207	49
20	41	32	32	50	278	311	368	2460	1170	188	192	48
21	37	53	32	49	190	297	411	1640	1060	172	130	57
22	38	125	33	48	154	397	530	1470	1050	153	127	50
23	39	59	30	47	140	353	584	1760	1030	127	110	49
24	39	42	25	45	155	445	688	2250	1110	98	70	49
25	82	44	32	44	142	2000	1010	2560	903	85	57	47
26	52	39	45	45	144	1150	755	2640	864	72	53	47
27	42	35	46	45	145	843	653	2630	836	57	50	47
28	92	34	45	38	168	639	650	2610	787	54	50	47
29	106	34	36	44	---	533	682	2680	800	53	50	51
30	62	33	34	36	---	519	738	2720	791	85	52	76
31	52	---	33	41	---	573	---	3070	---	58	50	---
TOTAL	1757	1251	1512	2260	5859	13121	14466	58133	54721	10470	2139	1551
MEAN	56.7	41.7	48.8	72.9	209	423	482	1875	1824	338	69.0	51.7
MAX	106	125	278	301	618	2000	1010	3070	3260	745	207	76
MIN	37	31	25	31	58	180	296	660	787	53	46	47
AC-FT	3490	2480	3000	4480	11620	26030	28690	115300	108500	20770	4240	3080
(a)	27,529	28,380	43,414	55,685	24,987	23,292	50,738	68,559	44,508	40,569	48,272	50,266
(b)	5,458	9,140	6,920	5,567	5,731	9,244	9,280	9,647	8,402	8,462	8,532	7,958

CAL YR 1974 TOTAL 244784 MEAN 671 MAX 3260 MIN 25 AC-FT 485500
WTR YR 1975 TOTAL 167240 MEAN 458 MAX 3260 MIN 25 AC-FT 331700

a Diversion, in acre-feet, to Camino powerplant, furnished by Sacramento Municipal Utility District.
b Diversion, in acre-feet, to El Dorado powerplant, furnished by Pacific Gas and Electric Co.

11443500 SOUTH FORK AMERICAN RIVER NEAR CAMINO, CALIF.

LOCATION.--Lat 38°46'23", long 120°42'02", in NE¼SW¼ sec.25, T.11 N., R.11 E., El Dorado County, on right bank 500 ft (152 m) downstream from Slab Creek Dam, 500 ft (152 m) upstream from Iowa Canyon Creek, and 2.8 mi (4.5 km) northwest of Camino.

DRAINAGE AREA.--493 mi² (1,277 km²).

PERIOD OF RECORD.--October 1922 to current year. Monthly discharge only for October 1922, published in WSP 1315-A. Records for the river and the American River flume, published separately October 1922 to September 1956, October 1962 to December 1964 when flume was destroyed. Records of river and flume combined October 1956 to September 1962.

GAGE.--Water-stage recorder. Altitude of gage is 1,620 ft (494 m), from topographic map. Nov. 1, 1950, to Dec. 5, 1951, nonrecording gage, Dec. 6, 1951, to May 27, 1964, water-stage recorder at site 100 ft (30 m) downstream at different datum. May 28, 1964, to Oct. 11, 1966, at site 1,000 ft (305 m) downstream at datum 11.37 ft (3.466 m) lower.

AVERAGE DISCHARGE.--37 years (1922-59, prior to extensive regulation and transbasin diversion in South Fork American River basin), 961 ft³/s (27.22 m³/s), 695,700 acre-ft/yr (858 hm³/yr), combined flow of South Fork American River and American River flume; 16 years (1959-75), 614 ft³/s (17.39 m³/s), 444,800 acre-ft/yr (548 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,900 ft³/s (53.8 m³/s) Mar. 25 (gage height, 11.14 ft or 3.395 m); minimum daily, 17 ft³/s (0.48 m³/s) Nov. 5, Dec. 31 to Jan. 7.

Period of record: Maximum discharge, 49,800 ft³/s (1,410 m³/s) Dec. 23, 1955 (gage height, 32.6 ft or 9.94 m, from floodmarks, site and datum then in use), from rating curve extended above 24,000 ft³/s (680 m³/s) on basis of computation of maximum flow over dam; minimum daily, 1.3 ft³/s (0.037 m³/s) Aug. 24, 1931.

REMARKS.--Records good. Flow regulated by six reservoirs, total usable capacity, 347,000 acre-ft (428 hm³) and since 1967 diversion from Slab Creek Dam to White Rock powerplant which bypass this station. Echo Lake conduit (see sta 11434500) imports up to 1,900 acre-ft (2.34 hm³) each year from Truckee River basin. Variable amounts of El Dorado Canal water (up to 40 ft³/s or 1.13 m³/s, May to October, and about 7 ft³/s or 0.20 m³/s remainder of the year) diverted for irrigation and domestic use between Pollock Pines and Placerville. Water from Jenkinson Lake in North Fork Consumnes River basin diverted to Camino and substituted for flow from El Dorado Canal in some years. Since October 1962 water is imported from the Upper Rubicon River basin by way of Robbs Peak tunnel (see sta 11429800). See schematic diagram of South Fork American River basin.

REVISIONS (WATER YEARS).--WSP 931: 1928, 1938, 1940(M). WSP 1931: Drainage area at former site.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	35	20	17	18	19	23	75	74	58	36	36
2	39	30	20	17	19	20	69	72	76	38	36	36
3	39	30	20	17	19	20	67	66	77	37	36	36
4	39	24	20	17	20	20	67	64	78	36	36	34
5	38	17	20	17	20	20	68	62	78	36	36	36
6	38	19	20	17	19	20	69	61	79	36	36	36
7	38	21	20	17	19	20	69	61	80	36	36	36
8	38	21	20	18	19	19	69	61	79	36	36	36
9	38	21	19	18	20	20	69	63	78	36	36	36
10	38	22	19	18	20	20	69	68	80	36	36	36
11	38	21	20	19	20	20	69	69	81	36	36	36
12	38	21	19	19	20	19	70	71	82	36	36	36
13	37	21	19	19	20	19	70	71	84	37	36	36
14	37	21	19	19	20	19	70	71	86	37	36	36
15	38	21	19	19	20	19	70	73	88	36	36	36
16	38	20	19	19	19	19	70	74	89	36	36	37
17	38	21	19	19	20	19	71	74	89	36	36	37
18	38	20	19	19	20	19	71	74	87	36	36	37
19	38	20	18	19	20	18	72	74	85	36	36	37
20	38	20	18	19	20	18	72	74	84	36	36	37
21	38	21	18	19	19	19	71	72	83	37	36	37
22	39	20	18	19	19	19	71	69	85	36	36	37
23	39	20	18	19	19	19	71	65	88	36	36	37
24	37	20	18	19	19	20	72	62	89	36	36	37
25	38	20	18	19	19	679	72	61	89	36	36	37
26	39	20	18	19	19	692	73	61	89	36	36	37
27	39	20	18	19	19	39	74	61	88	36	36	37
28	39	20	18	18	19	22	74	61	87	36	36	37
29	38	20	18	18	---	23	75	61	88	36	36	37
30	38	20	18	18	---	23	76	66	89	36	36	37
31	38	---	17	18	---	23	---	71	---	36	36	---
TOTAL	1183	647	584	568	544	1965	2053	2088	2509	1144	1116	1093
MEAN	38.2	21.6	18.8	18.3	19.4	63.4	68.4	67.4	83.6	36.9	36.0	36.4
MAX	39	35	20	19	20	692	76	75	89	58	36	37
MIN	37	17	17	17	18	18	23	61	74	36	36	34
AC-FT	2350	1280	1160	1130	1080	3900	4070	4140	4980	2270	2210	2170

CAL YR 1974 TOTAL 22352 MEAN 61.2 MAX 1140 MIN 16 AC-FT 44340
WTR YR 1975 TOTAL 15494 MEAN 42.4 MAX 692 MIN 17 AC-FT 30730

11444500 SOUTH FORK AMERICAN RIVER NEAR PLACERVILLE, CALIF.

LOCATION.--Lat 38°46'16", long 120°48'55", in NE¼SW¼ sec.25, T.11 N., R.10 E., El Dorado County, on right bank 700 ft (213 m) downstream from Chili Bar Dam, 0.5 mi (0.8 km) upstream from Big Canyon, and 2.5 mi (4.0 km) north of Placerville.

DRAINAGE AREA.--598 mi^2 (1,549 km^2).

PERIOD OF RECORD.--August 1911 to July 1920, July 1964 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 931.05 ft (283.784 m) above mean sea level (levels by Pacific Gas and Electric Co.). Aug. 11, 1911, to July 31, 1920, nonrecording gage 0.6 mi (1.0 km) downstream at different datum.

AVERAGE DISCHARGE (prior to extensive regulation and transbasin diversion).--9 years (1911-20), 1,132 ft^3/s (32.06 m^3/s), 820,100 acre-ft/yr (1.01 km^3/yr); 11 years (1964-75), 1,583 ft^3/s (44.83 m^3/s), 1,147,000 acre-ft/yr (1.41 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,270 ft^3/s (178 m^3/s) Mar. 25 (gage height, 8.57 ft or 2.612 m); minimum daily, 114 ft^3/s (3.23 m^3/s) Oct. 28.

Period of record: Maximum discharge, 47,300 ft^3/s (1,340 m^3/s) Dec. 23, 1964 (gage height, 17.4 ft or 5.30 m, from floodmarks), from rating curve extended above 18,000 ft^3/s (510 m^3/s) on basis of computations of flow over dam of maximum flow; minimum daily, 0.2 ft^3/s (0.006 m^3/s) Nov. 12, 1964.

REMARKS.--Flow regulated by storage, diversions, and powerplants. See schematic diagram of South Fork American River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	328	831	316	513	714	597	1880	2850	3920	1440	1160	1130
2	623	479	1100	903	[illegible]	506	1840	3020	3920	1710	1180	1190
3	825	345	1440	1240	338	797	1820	3240	3940	2070	619	1290
4	1030	774	1020	1240	833	1130	1710	3430	3960	1100	725	1400
5	789	888	854	325	1230	1210	1010	3030	3950	1640	1020	1430
6	334	697	1030	1380	1670	1190	740	2850	3950	1220	965	1150
7	339	501	1030	1690	1680	1210	1290	2760	3940	1220	1190	1080
8	775	767	631	1520	1150	1560	1830	2550	3940	1610	1220	1150
9	555	630	893	1360	1140	667	1850	2870	3920	1290	959	1190
10	622	313	1020	874	1510	1150	1800	3030	3160	1230	734	1190
11	654	684	1070	960	1350	1260	1940	3070	3150	978	699	1170
12	615	825	1130	324	1190	1300	1930	3130	3120	1070	1090	1080
13	331	814	1050	968	1570	1270	1300	3730	3040	595	1070	1130
14	328	781	933	1360	1620	1100	2240	3780	2930	1300	1020	1030
15	650	797	567	1580	1450	1040	2050	3740	3200	1530	1090	1050
16	457	495	1210	1390	561	901	2010	3490	3070	1050	1050	1170
17	660	313	1020	1510	480	1290	1960	3850	3380	1290	607	1050
18	658	778	1360	1100	1040	1440	1990	3880	3380	1340	595	808
19	458	791	1290	686	757	815	1840	3900	3110	935	1040	947
20	331	644	1210	1280	1220	1010	1510	3900	2760	714	1200	918
21	324	959	1120	1110	1490	1200	1860	3930	2120	1110	1330	791
22	667	935	947	1420	944	1680	2180	3860	796	1590	1180	884
23	671	999	1030	1440	936	836	1960	3850	1340	852	1040	878
24	659	376	1040	1290	938	1280	2190	3860	1880	1310	1250	1130
25	666	1040	542	1010	984	4020	2710	3850	1490	1400	1270	1100
26	783	1010	962	734	480	3750	2270	3870	1530	651	1070	896
27	410	1010	1320	1200	1070	2450	1930	3870	1300	557	1190	866
28	114	326	1400	2060	923	2250	2180	3860	1170	699	1200	673
29	1210	629	317	1760	---	1500	2090	3850	987	962	1210	925
30	608	763	1380	1100	---	1440	2310	3890	1210	897	1140	933
31	786	---	868	1650	---	1740	---	3910	---	1220	1170	---
TOTAL	18340	21194	30780	36585	29813	43589	56220	108700	83543	36660	32283	31629
MEAN	592	706	993	1180	1065	1406	1874	3506	2785	1183	1041	1054
MAX	1210	1040	1400	2060	1680	4020	2710	3930	3950	2070	1330	1430
MIN	114	313	316	324	338	506	740	2550	796	557	595	673
AC-FT	36380	42040	61050	72570	59130	86460	111500	215600	165700	72720	64030	62740

CAL YR 1974 TOTAL 723580 MEAN 1982 MAX 5890 MIN 114 AC-FT 1435000
WTR YR 1975 TOTAL 529336 MEAN 1450 MAX 4020 MIN 114 AC-FT 1050000

11445500 SOUTH FORK AMERICAN RIVER NEAR LOTUS, CALIF.

LOCATION.--Lat 38°49'07", long 120°56'45", in NW¼SW¼ sec.11, T.11 N., R.9 E., El Dorado County, on left bank 0.4 mi (0.6 km) downstream from Greenwood Creek, 2.4 mi (3.9 km) northwest of Lotus, and 3.3 mi (5.3 km) northwest of Coloma.

DRAINAGE AREA.--673 mi² (1,743 km²).

PERIOD OF RECORD.--May 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 635 ft (194 m), from topographic map.

AVERAGE DISCHARGE.--11 years (1951-62, prior to extensive regulation and transbasin diversion), 1,109 ft³/s (31.41 m³/s), 802,900 acre-ft/yr (990 hm³/yr); 13 years (1962-75), 1,555 ft³/s (44.04 m³/s), 1,127,000 acre-ft/yr (1.39 km³/yr).

EXTREMES.--Current year: Maximum discharge, 10,900 ft³/s (309 m³/s) Mar. 25 (gage height, 10.77 ft or 3.283 m); minimum daily, 140 ft³/s (3.96 m³/s) Oct. 28.

Period of record: Maximum discharge, 71,800 ft³/s (2,030 m³/s) Dec. 23, 1955 (gage height, 21.37 ft or 6.514 m); minimum daily, 50 ft³/s (1.42 m³/s) Oct. 21, 22, 1964.

Maximum stage known since 1862 and prior to beginning of record, 20.4 ft (6.22 m), from floodmarks, Nov. 21, 1950 (discharge, 64,500 ft³/s or 1,830 m³/s).

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow regulated by storage, diversions, and powerplants. See schematic diagram of South Fork American River basin.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	350	800	393	692	1020	753	1880	2820	3850	1270	1260	1190
2	620	540	1070	904	1110	584	1980	3010	3860	1720	1100	1170
3	850	400	1420	1270	597	863	1930	3250	3880	2000	835	1270
4	1050	800	1370	1260	1300	1030	1930	3500	3880	1380	664	1290
5	850	920	1010	481	1220	1230	1500	3100	3880	1360	977	1600
6	360	500	1120	1370	1830	1570	1010	2920	3880	1290	959	1230
7	370	559	1060	1940	1820	1140	1260	2740	3880	1200	1050	1150
8	800	708	781	2040	1420	1830	1900	2660	3880	1610	1220	1130
9	600	736	915	1730	1670	1090	2020	2810	3860	1380	1050	1160
10	650	387	1030	935	2090	1100	1990	2960	3120	1180	826	1240
11	700	722	1080	659	1820	1360	1970	3060	3100	1170	632	1200
12	670	787	1180	447	1180	1430	2010	3080	3080	988	1060	1240
13	360	933	1040	815	2380	1400	1480	3670	3020	697	1060	1050
14	360	858	957	1310	2030	1400	2170	3760	2900	1050	1060	1170
15	680	868	672	1770	1870	1240	2110	3760	3130	1540	1010	1070
16	500	577	1020	1380	796	1360	2050	3460	3040	1210	1130	1120
17	700	389	1410	1690	641	1190	2070	3830	3340	1110	788	1100
18	700	830	1400	1180	882	1900	2030	3860	3330	1350	531	1040
19	500	883	1350	842	962	1050	2070	3890	3060	1070	1030	925
20	350	699	1480	1000	1480	1110	1500	3870	2730	738	1160	970
21	350	836	1500	1370	1680	1270	1950	3900	2310	863	1340	835
22	700	1080	975	1180	1300	2260	2190	3820	1080	1590	1420	885
23	710	965	813	1660	902	1420	2170	3790	1070	1090	1030	907
24	700	406	1320	1160	1060	1330	2180	3810	1860	1830	1440	965
25	710	1050	608	1350	972	7180	2860	3800	1510	1590	1200	1180
26	820	1070	871	811	736	5230	2420	3810	1540	726	1220	1020
27	480	1100	1190	898	937	2860	2120	3810	1290	617	1140	911
28	140	519	1880	1930	1200	2510	2120	3810	1350	649	1210	713
29	1280	649	492	1910	---	1960	2170	3810	803	963	1170	922
30	750	753	1250	1110	---	1290	2280	3830	1320	842	1270	934
31	820	---	1480	1740	---	1950	---	3840	---	1070	1130	---
TOTAL	19480	22484	34057	38834	36907	53970	59320	108040	82833	36343	32972	32587
MEAN	628	749	1099	1253	1318	1741	1977	3485	2761	1172	1064	1086
MAX	1280	1100	1880	2040	2380	7180	2860	3900	3880	2000	1440	1600
MIN	140	387	393	447	597	584	1010	2660	803	617	531	713
AC-FT	38640	44600	67550	77030	73210	107000	117700	214300	164300	72090	65400	64640

CAL YR 1974 TOTAL 762084 MEAN 2088 MAX 8830 MIN 140 AC-FT 1512000
WTR YR 1975 TOTAL 557827 MEAN 1528 MAX 7180 MIN 140 AC-FT 1106000

NOTE.--No gage-height record Oct. 1 to Nov. 5.

11445500 SOUTH FORK AMERICAN RIVER NEAR LOTUS, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: July 1958 to September 1963, water years 1964-66 (partial-record station).
Water temperatures: December 1959 to September 1968, February 1970 to current year.
Sediment records: Water years 1957-62 (partial-record station).

EXTREMES.--Current year:
Water temperatures: Maximum, 19.0°C July 28, Aug. 4; minimum, 2.5°C Mar. 28, 29, Apr. 1, 2.
Period of record:
Water temperatures: Maximum, 29.5°C July 20, 1960; minimum (1959-68, 1970 to current year), 1.0°C on several days in 1960 and 1962.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	13.5	11.5	10.5	8.0	7.5	6.5	5.5	6.5	5.5	6.5	6.0
2	16.5	15.0	11.0	9.5	8.5	8.0	6.0	5.0	6.5	6.5	7.5	6.5
3	16.5	14.0	11.0	9.5	9.0	8.5	6.0	5.0	7.0	6.5	8.0	6.5
4	16.0	14.0	11.0	9.5	9.0	8.0	6.0	6.0	7.0	6.0	7.5	6.0
5	15.5	13.5	11.0	9.5	8.5	7.5	6.0	6.0	7.0	6.0	6.5	6.0
6	15.5	13.0	11.0	9.5	8.5	7.5	7.0	6.0	6.5	6.0	7.0	6.0
7	16.0	14.0	10.5	10.0	8.5	7.5	7.0	7.0	7.0	6.0	7.0	6.5
8	16.0	15.0	10.5	9.5	8.5	8.0	8.0	7.0	7.5	6.0	7.5	6.5
9	16.0	14.0	10.5	9.0	8.0	7.0	7.0	6.5	8.5	6.5	7.5	7.0
10	15.5	14.0	10.5	9.0	8.0	7.0	7.0	6.5	8.5	7.5	8.5	7.5
11	15.5	13.5	10.5	9.5	8.0	8.0	7.0	6.0	7.5	6.5	8.5	6.5
12	15.5	13.0	10.5	9.0	8.0	8.0	6.5	5.5	6.5	6.0	8.0	6.0
13	15.0	13.0	10.5	9.0	8.5	8.0	6.5	5.5	7.5	6.5	6.5	6.0
14	15.5	13.0	10.0	9.0	8.5	7.5	6.5	5.0	7.5	6.5	7.0	6.0
15	15.5	13.5	10.0	9.0	8.0	7.5	6.5	5.5	6.5	5.5	7.0	6.5
16	15.5	12.5	9.5	9.0	8.0	8.0	6.5	5.5	6.5	5.0	8.0	6.5
17	15.0	13.0	10.0	9.5	8.0	8.0	6.5	5.5	5.5	4.5	7.5	6.5
18	15.0	13.0	10.5	9.5	8.0	8.0	6.5	5.5	6.0	4.5	7.5	5.0
19	14.0	12.5	10.0	8.5	8.0	7.0	6.5	5.5	6.5	5.0	7.5	7.0
20	14.5	12.5	9.5	8.5	8.0	7.5	6.5	5.5	7.0	6.0	8.0	6.5
21	14.0	12.5	10.0	9.5	8.0	7.5	6.5	6.0	6.5	5.0	7.0	6.5
22	13.5	12.0	10.0	8.5	8.0	7.0	7.0	5.5	6.5	4.5	7.0	6.5
23	13.0	11.5	9.0	8.0	7.0	5.5	7.0	6.0	7.0	4.5	7.5	6.5
24	12.5	11.0	9.0	8.0	7.0	6.5	7.0	6.0	7.0	5.0	8.5	7.5
25	12.5	11.0	9.5	8.5	7.0	6.0	7.0	6.0	7.0	5.0	9.0	7.5
26	12.5	11.0	9.0	8.0	6.5	5.5	7.0	6.0	8.0	5.5	7.5	3.5
27	12.5	11.0	9.0	8.0	6.5	6.5	6.0	5.0	7.5	6.0	7.5	3.0
28	13.5	12.5	8.5	7.5	7.0	6.5	6.5	5.0	7.5	5.5	8.0	2.5
29	13.0	11.0	8.5	7.5	6.5	6.0	6.5	5.5	---	---	8.5	2.5
30	11.5	10.5	8.5	7.0	6.5	6.0	6.0	5.0	---	---	8.0	3.0
31	11.5	11.0	---	---	6.5	5.5	5.5	5.0	---	---	6.5	3.5
MONTH	16.5	10.5	11.5	7.0	9.0	5.5	8.0	5.0	8.5	4.5	9.0	2.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.5	2.5	8.0	5.5	11.5	10.0	16.0	12.5	17.0	13.5	14.5	12.0
2	5.5	2.5	9.5	5.5	11.0	10.0	16.0	12.5	17.0	14.0	14.5	12.0
3	7.0	3.5	8.0	7.5	11.5	10.0	16.0	12.5	17.0	13.5	14.5	11.5
4	7.5	6.5	9.0	7.5	12.5	10.0	16.0	13.0	19.0	15.5	14.5	11.5
5	7.0	6.5	9.0	6.5	12.0	10.0	16.5	13.0	16.5	14.5	14.5	11.5
6	7.5	6.5	8.5	4.5	12.0	10.5	16.5	13.0	16.5	14.0	14.5	11.5
7	7.0	6.5	9.0	5.0	12.0	10.5	17.5	14.0	16.5	13.5	14.5	12.0
8	7.0	6.0	9.0	5.5	12.0	10.5	18.5	13.5	16.5	13.0	14.5	12.5
9	8.0	5.0	9.5	6.5	12.5	10.5	17.5	14.5	16.5	13.0	15.0	12.5
10	8.0	4.5	10.0	6.5	13.5	11.0	16.5	14.5	16.5	13.5	13.5	12.5
11	7.5	3.0	10.0	6.0	13.0	11.0	17.5	14.0	18.0	14.0	14.5	12.0
12	6.0	3.0	9.5	6.5	13.5	11.0	17.5	14.5	16.5	14.0	15.0	12.0
13	6.0	3.0	10.5	6.5	13.5	11.0	18.0	14.0	16.0	13.5	15.0	12.5
14	6.5	4.0	10.5	7.0	14.0	11.5	18.5	15.5	16.0	13.5	14.5	12.0
15	7.0	4.5	10.0	7.0	13.5	11.5	15.5	14.0	16.0	13.5	14.5	12.5
16	7.5	4.5	10.0	8.5	14.0	11.5	17.5	14.0	16.0	13.0	14.5	12.0
17	7.5	3.5	10.0	8.5	13.5	11.5	17.0	14.5	15.5	13.0	16.5	12.5
18	6.5	3.0	10.5	9.0	13.5	11.5	17.0	14.0	15.0	14.0	14.5	12.5
19	6.5	3.5	10.5	9.5	13.0	11.0	17.0	13.5	15.0	13.0	15.0	12.5
20	6.0	3.0	10.0	9.0	14.0	11.0	17.0	14.5	15.5	13.0	15.0	12.5
21	5.5	3.5	10.0	8.5	14.0	11.0	18.0	15.0	14.0	13.0	15.0	13.0
22	5.5	3.0	9.5	8.0	14.5	11.5	17.0	13.5	15.5	12.5	15.0	12.5
23	6.0	3.5	10.5	8.5	16.0	12.5	17.0	13.5	16.0	13.0	15.0	12.5
24	8.0	4.0	11.0	9.0	13.0	11.5	17.5	14.5	15.5	12.5	15.0	12.5
25	8.5	6.0	11.5	9.5	15.5	11.0	17.0	13.5	15.5	13.0	15.0	12.0
26	8.0	4.0	11.0	9.0	16.0	11.5	17.5	14.0	15.5	12.5	14.5	12.0
27	6.5	3.5	11.0	9.5	14.5	11.5	17.5	14.5	15.0	12.5	14.5	12.0
28	6.5	3.5	11.0	9.0	15.0	11.5	19.0	16.5	15.0	12.5	14.5	12.0
29	6.5	3.0	11.5	9.0	16.0	12.0	18.5	15.5	15.0	12.0	14.5	12.0
30	7.5	5.5	11.5	9.0	15.5	12.5	17.5	14.5	15.0	12.0	14.5	12.0
31	---	---	11.5	9.5	---	---	17.0	14.0	15.0	12.0	---	---
MONTH	8.5	2.5	11.5	4.5	16.0	10.0	19.0	12.5	19.0	12.0	16.5	11.5

11446200 FOLSOM LAKE NEAR FOLSOM, CALIF.

LOCATION.--Lat 38°42'29", long 121°09'22", in NW¼NE¼ sec.24, T.10 N., R.7 E., Sacramento County, near center of dam on American River, 0.7 mi (1.1 km) downstream from South Fork American River, and 2.3 mi (3.7 km) northeast of Folsom.

DRAINAGE AREA.--1,861 mi² (4,820 km²).

PERIOD OF RECORD.--February 1955 to current year. Prior to October 1959, published as Folsom Reservoir near Folsom.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents, 956,900 acre-ft (1.18 km³) June 21 (elevation, 461.28 ft or 140.598 m); minimum, 593,300 acre-ft (732 hm³) Jan. 5 (elevation, 425.16 ft or 129.589 m).

Period of record: Maximum contents, 1,024,400 acre-ft (1.26 km³) June 15, 1963 (elevation, 467.23 ft or 142.412 m); minimum since storage pool first filled, 261,500 acre-ft (322 hm³) Jan. 7, 1960 (elevation, 378.23 ft or 115.284 m).

REMARKS.--Reservoir is formed by concrete gravity-type dam with rolled-earth-wing dams, auxiliary dams, and dikes, completed May 14, 1956; storage began Feb. 25, 1955. Total capacity, 1,010,300 acre-ft (1.25 km³) between elevations 205.5 ft (62.64 m), invert of lower tier of river outlets and 466.0 ft (142.04 m), gross pool elevation, all of which is available for release. Spillway design flood pool elevation, 475.4 ft (144.90 m), capacity, 1,120,200 acre-ft (1.38 km³). Records, including extremes, represent usable contents at 2400 hours. See schematic diagram of South Fork American River basin.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS.--WSP 1931: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

370	222,300	420	548,300
380	270,700	440	732,900
390	327,800	460	942,600
400	393,300	480	1,176,000

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	768300	683300	638900	596600	631700	608200	703600	693900	876800	939300	852500	790700
2	763100	681900	637300	595300	637300	604200	698800	698000	883200	938200	850000	789900
3	759100	678800	636200	594700	640200	600500	693900	703100	889600	937200	846900	788800
4	755400	677300	636500	594700	646400	599500	691200	707300	895700	935300	843500	788500
5	750800	676400	635600	593300	647700	599900	688000	710800	901300	932100	840400	790600
6	744800	675600	634200	594700	645700	601400	683300	713200	908000	929700	837200	790600
7	738900	674500	632100	600400	642700	603600	678700	714800	914500	926300	834200	789500
8	734400	673200	628700	609800	639500	612000	674900	717000	919800	924200	831700	788500
9	729500	671900	625900	615300	645900	616500	670900	719500	924500	922000	828900	787900
10	725100	669100	623100	617000	656600	618600	667800	722700	927500	919200	825500	787500
11	720500	667400	620400	617200	659300	620700	665600	727900	929700	916600	821500	786700
12	715300	667000	618100	617200	655200	622500	666500	734600	931800	913700	819100	785900
13	710300	666900	615200	616900	663000	624700	666200	743100	933500	910300	816300	786200
14	707200	666400	612600	617800	665300	626200	667800	752200	937300	906700	813400	786500
15	705700	666200	609000	619600	662100	627100	668500	762200	941200	904300	810000	785400
16	703900	664800	605400	621300	654800	630700	668800	769000	945200	901200	808600	784700
17	702600	662900	603900	623200	646200	632200	669000	776800	949000	897900	806700	784200
18	701400	661800	604100	623800	637300	632900	669200	786100	952200	895500	804400	782900
19	699700	661200	604300	623400	629700	631700	668500	796000	954300	892600	803300	781500
20	697200	659500	604100	622800	631000	633100	666600	804000	955900	887900	802600	780400
21	694700	658700	604200	623700	631500	635000	666000	809500	956900	884100	802300	779700
22	693400	658600	603500	624000	629900	642700	666500	813400	955700	881500	802500	778500
23	692700	657200	601900	625400	626900	646000	668000	818000	952900	878000	800800	777700
24	691600	654200	601600	626000	623900	648500	669100	823700	952100	875100	800300	776600
25	690900	652200	599900	626500	621000	693300	678100	830300	951600	874000	799400	776300
26	689100	651600	598200	626100	617800	711500	682600	836300	950000	871800	797600	775800
27	688000	650600	598000	625600	614700	717300	685000	842600	948900	868200	796100	775500
28	686300	648000	599900	627300	612100	718400	686600	849300	947100	864300	794800	774700
29	685000	645300	598900	629100	---	716700	688900	856000	944000	861200	793400	773600
30	683900	642500	598100	629900	---	711700	690400	862800	941800	857600	792700	773000
31	683700	---	597800	630500	---	707800	---	869600	---	854600	791500	---
MAX	768300	683300	638900	630500	665300	718400	703600	869600	956900	939300	852500	790700
MIN	683700	642500	597800	593300	612100	599500	665600	693900	876800	854600	791500	773000
(a)	434.94	430.56	425.66	429.26	427.25	437.44	435.64	453.30	459.92	451.89	445.83	444.01
(b)	-89,100	-41,200	-44,700	+32,700	-18,400	+95,700	-17,400	+179,200	+72,200	-87,200	-63,100	-18,500
(c)	3,430	990	500	450	1,020	1,490	2,450	5,730	7,320	7,240	6,260	5,050

CAL YR 1974 b +200
WTR YR 1975 b -83,000

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11446500 AMERICAN RIVER AT FAIR OAKS, CALIF.

LOCATION.--Lat 38°38'08", long 121°13'36", in SE¼NE¼ sec.17, T.9 N., R.7 E., Sacramento County, on right bank 2,100 ft (640 m) downstream from Nimbus Dam, 2.4 mi (3.9 km) east of Fair Oaks, 8.1 mi (13.0 km) downstream from South Fork, and at mile 22.2 (35.7 km).

DRAINAGE AREA.--1,888 mi² (4,890 km²).

PERIOD OF RECORD.--November 1904 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 71.53 ft (21.802 m) above mean sea level. Prior to Nov. 7, 1930, nonrecording gages or water-stage recorders at several sites 2.2 mi (3.5 km) downstream, all at datum 5.74 ft (1.750 m) lower. Nov. 7, 1930, to Dec. 31, 1957, at site 2.2 mi (3.5 km) downstream at datum 6.74 ft (2.054 m) lower. Dec. 31, 1957, to July 15, 1970, at datum 6.00 ft (1.829 m) higher.

AVERAGE DISCHARGE (adjusted for change in contents, diversions, and evaporation from Folsom Lake since 1955).--71 years, 3,816 ft³/s (108.1 m³/s), 2,765,000 acre-ft/yr (3.41 km³/yr).

EXTREMES.--Current year: Maximum discharge, 8,450 ft³/s (239 m³/s) Mar. 25 (gage height, 9.85 ft or 3.002 m); minimum daily, 1,750 ft³/s (49.6 m³/s) Sept. 5.

Period of record: Maximum discharge, 180,000 ft³/s (5,100 m³/s) Nov. 21, 1950 (gage height, 31.85 ft or 9.708 m, site and datum then in use); minimum, 3.6 ft³/s (0.10 m³/s) Aug. 16, 1924. Maximum discharge since construction of Folsom Dam in 1953, 115,000 ft³/s (3,260 m³/s) Dec. 23-25, 1964 (gage height, 21.65 ft or 6.599 m); minimum, 86 ft³/s (2.44 m³/s) Apr. 7, 1955.

REMARKS.--Records excellent. Flow regulated by Folsom Lake beginning Feb. 25, 1955 (see sta 11446200). Some minor regulation of high flows by temporary pondage during period of construction January 1953 to February 1955. Diurnal fluctuations from Folsom powerplant re-regulated by Nimbus Reservoir, capacity, 2,800 acre-ft (3.45 hm³) between normal operating elevations 118.5 ft (36.12 m) and 125.0 ft (38.10 m) and powerplant. Many diversions above station for irrigation, municipal, and domestic water supply. Diversions of San Juan Suburban Water District, Cordova Water Service, city of Folsom, city of Roseville, and State of California are made at Folsom Dam. Diversion to Folsom South Canal from Nimbus Reservoir started in June 1973. Some inflow from Bear and Yuba River basins.

REVISIONS (WATER YEARS).--WSP 1181: 1928(M). WSP 1515: 1907(M), 1910, 1931(M), 1943(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4100	2440	3050	2010	1990	5160	8240	5300	5210	3600	3050	2360
2	4130	2410	3060	2010	1990	5160	8250	5250	5230	3590	3020	2370
3	4120	2420	3060	2010	2010	5140	8190	5370	5270	3580	3030	2360
4	4120	2410	3060	2010	2010	4100	7580	5390	5250	3570	3050	2330
5	4100	2420	3050	2010	2050	4090	7480	5240	5250	3570	3140	1750
6	4150	2410	3050	2010	3040	4050	7460	5330	5280	3550	3050	2340
7	4190	2420	3060	1990	4930	4090	7480	5340	5270	3570	3050	2340
8	4210	2420	3060	1930	4990	4120	7490	5310	5260	3580	3060	2350
9	4210	2420	3080	1930	5000	4040	7580	5420	5240	3590	3060	2350
10	4150	2430	3060	1940	4990	4150	7450	5470	5230	3590	3050	2340
11	4210	2440	3050	1940	5010	4170	6200	5270	5240	3590	3060	2340
12	4180	2440	3040	1930	5040	4120	5100	5240	5230	3570	3060	2280
13	3590	2440	3050	1940	6870	4140	5090	5120	5170	3570	3060	1760
14	3070	2400	3050	1940	7900	4130	5110	5150	4150	3560	3060	1850
15	2450	2400	3030	1940	7530	4140	5140	5150	4160	3590	3030	2400
16	2400	2400	3010	1940	7510	4200	5160	5170	4160	3640	2490	2400
17	2400	2390	2480	1940	7510	4190	5090	5170	4160	3620	2460	2400
18	2390	2390	1980	1940	7510	5140	5110	5170	4160	3610	2470	2360
19	2400	2400	1950	1920	7440	5180	5070	5170	4160	3610	2450	2410
20	2420	3000	1930	1950	7480	5160	5110	5180	4160	3600	2460	2370
21	2430	3030	1960	1970	5280	5180	5100	5180	3520	3580	2450	2360
22	2440	3030	1960	1980	4990	5230	5110	5190	3570	3570	2440	2360
23	2430	3040	1960	1990	4980	5260	5080	5180	3570	3530	2440	2390
24	2420	3040	1950	1990	4980	5290	5110	5160	3590	3080	2440	2370
25	2430	3040	1950	1970	4950	7280	5120	5170	3600	3090	2440	2380
26	2430	3040	1950	1970	4990	8210	5140	5180	3570	3040	2450	2380
27	2430	3030	1950	1970	5000	8240	5080	5250	3590	3040	2460	2380
28	2440	3030	1960	1960	5140	8240	5100	5250	3590	3070	2460	2290
29	2430	3040	1970	1990	---	8190	5080	5230	3580	3070	2460	2360
30	2440	3040	2010	1980	---	8230	5090	5200	3580	3050	2460	2300
31	2440	---	2020	2000	---	8240	---	5190	---	3040	2420	---
TOTAL	97750	79260	78800	61000	143110	166260	180390	162390	133000	106910	85080	69110
MEAN	3153	2642	2542	1968	5111	5363	6013	5238	4433	3449	2745	2304
MAX	4210	3040	3080	2010	7900	8240	8250	5470	5230	3640	3140	2410
MIN	2390	2390	1930	1920	1990	4040	5070	5120	3520	3040	2420	1750
AC-FT	193900	157200	156300	121000	283900	329800	357800	322100	263800	212100	168800	137100
MEAN a	1,869	2,027	1,888	2,594	4,858	7,014	5,833	8,389	5,953	2,319	1,989	2,230
AC-FTa	114,900	120,600	116,100	159,500	269,800	431,300	347,100	515,800	354,200	142,600	122,300	132,700
(b)	6,658	3,606	3,955	5,352	3,266	4,346	4,287	8,764	10,869	10,485	10,384	9,040

CAL YR 1974 TOTAL 1,965,010 MEAN 5,384 MAX 26,400 MIN 1,800 AC-FT 3,898,000 MEAN a 5,416 AC-FT a 3,921,000
WTR YR 1975 TOTAL 1,363,060 MEAN 3,734 MAX 8,250 MIN 1,750 AC-FT 2,704,000 MEAN a 3,905 AC-FT a 2,827,000

a Adjusted for change in contents, diversions, and evaporation from Folsom Lake.

b Diversions, in acre-feet, to Cordova Water Service, city of Folsom, city of Roseville, San Juan Suburban Water District, Folsom South Canal, and to State of California, furnished by Bureau of Reclamation.

11446500 AMERICAN RIVER AT FAIR OAKS, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: January to December 1906, March 1951 to September 1958, November 1959 to September 1962.
Water temperatures: March 1951 to September 1958, November 1959 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 18.0°C on several days during August and September; minimum, 8.5°C on several days during January and February.
Period of record (see REMARKS below):
Water temperatures (1951-55): Maximum, 27.0°C July 27, Aug. 3, 1954; minimum, 3.5°C Oct. 30, 31, 1954.
Water temperatures (1956-58, 1959-64, 1965-69, 1970 to current year): Maximum, 26.0°C Sept. 28, 1961; minimum, freezing point on several days in 1957 and 1958.

REMARKS.--Water temperatures affected by construction of Folsom Dam beginning in February 1955. Extremes are given for two separate periods--1951-55, and 1956 to current year.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	16.5	16.5	16.5	14.0	14.0	10.5	10.5	9.0	8.5	9.5	9.5
2	16.5	16.0	16.5	16.0	14.0	14.0	10.5	10.5	9.0	9.0	9.5	9.5
3	16.0	16.0	16.0	16.0	14.0	13.5	10.5	10.5	9.5	9.5	9.5	9.5
4	16.0	15.5	16.0	16.0	13.5	13.5	10.5	10.5	9.5	9.0	10.0	9.5
5	16.0	15.5	16.0	16.0	13.5	13.5	10.5	10.5	9.5	9.0	10.0	10.0
6	15.5	15.5	16.0	16.0	13.5	13.5	10.5	10.0	9.0	8.5	10.0	10.0
7	16.0	15.5	16.0	16.0	13.5	13.5	10.0	10.0	8.5	8.5	10.0	10.0
8	16.0	16.0	16.0	16.0	13.5	13.0	10.0	10.0	8.5	8.5	9.5	9.5
9	16.0	16.5	16.0	15.5	13.0	13.0	10.0	10.0	8.5	8.5	10.0	9.5
10	16.0	16.0	15.5	15.5	13.0	12.5	10.0	10.0	8.5	8.5	10.0	10.0
11	16.0	16.0	15.5	15.5	12.5	12.5	10.0	10.0	8.5	8.5	10.0	10.0
12	16.0	16.0	15.5	15.5	12.5	12.5	10.0	10.0	8.5	8.5	10.0	10.0
13	16.5	16.0	15.5	15.5	12.5	12.5	10.0	10.0	8.5	8.5	10.0	10.0
14	16.5	16.5	15.5	15.5	12.5	12.5	10.0	10.0	8.5	8.5	10.0	9.5
15	16.5	16.5	15.5	15.5	12.5	12.5	10.0	9.5	8.5	8.5	9.5	9.5
16	16.5	16.5	15.5	15.5	12.5	12.0	9.5	9.5	8.5	8.5	9.5	9.5
17	16.5	16.5	15.5	15.5	12.5	12.0	9.5	9.5	8.5	8.5	9.5	9.5
18	16.5	16.5	15.5	15.5	12.5	12.5	9.5	9.5	8.5	8.5	10.0	9.5
19	16.5	16.5	15.5	15.0	12.5	12.5	9.5	9.5	9.0	8.5	10.0	10.0
20	16.5	16.5	15.0	15.0	12.5	12.0	9.5	9.5	9.0	8.5	10.0	9.5
21	16.5	16.5	15.0	15.0	12.0	12.0	9.0	9.0	9.0	9.0	10.0	9.5
22	16.5	16.5	15.0	15.0	12.0	12.0	9.0	9.0	9.0	9.0	9.5	9.5
23	16.5	16.5	15.0	14.5	12.0	11.5	9.0	9.0	9.0	9.0	9.5	9.5
24	16.5	16.5	14.5	14.5	11.5	11.5	9.0	9.0	9.0	9.0	9.5	9.5
25	16.5	16.5	14.5	14.5	11.5	11.5	9.5	9.0	9.5	9.0	9.5	9.5
26	16.5	16.5	14.5	14.5	11.5	11.5	9.5	9.5	9.5	9.5	9.5	9.5
27	16.5	16.5	14.5	14.5	11.5	11.5	9.5	9.5	9.5	9.5	9.5	9.5
28	16.5	16.5	14.5	14.0	11.5	11.0	9.5	9.0	9.5	9.5	9.5	9.5
29	16.5	16.5	14.0	14.0	11.0	11.0	9.0	9.0	---	---	10.0	9.5
30	16.5	16.5	14.0	14.0	11.0	11.0	9.0	9.0	---	---	10.0	9.5
31	16.5	16.5	---	---	11.0	10.5	9.0	8.5	---	---	10.0	9.5
MONTH	16.5	15.5	16.5	14.0	14.0	10.5	10.5	8.5	9.5	8.5	10.0	9.5

11446500 AMERICAN RIVER AT FAIR OAKS, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.5	12.0	11.5	---	---	14.5	14.5	17.5	17.0	18.0	17.5
2	10.0	9.5	12.0	12.0	---	---	15.0	14.5	17.0	17.0	18.0	18.0
3	10.0	9.5	12.0	11.5	---	---	15.0	14.5	17.0	17.0	18.0	18.0
4	9.5	9.5	11.5	11.0	---	---	15.0	15.0	17.0	17.0	18.0	17.5
5	9.5	9.5	12.0	11.5	---	---	15.0	15.0	17.0	17.0	17.5	17.5
6	9.5	9.5	12.0	12.0	---	---	15.0	15.0	17.0	16.5	17.5	17.5
7	9.5	9.5	12.0	12.0	---	---	15.0	15.0	17.0	17.0	17.5	17.5
8	9.5	9.5	---	---	---	---	15.5	15.0	17.0	17.0	17.5	17.5
9	10.0	9.5	---	---	---	---	15.5	15.5	17.0	17.0	17.5	17.0
10	10.0	10.0	---	---	---	---	15.5	15.5	17.0	17.0	17.5	17.0
11	10.0	10.0	---	---	---	---	15.5	15.5	17.0	17.0	17.0	17.0
12	10.5	10.0	---	---	---	---	15.5	15.5	17.0	17.0	17.0	17.0
13	10.5	10.5	---	---	---	---	15.5	15.5	17.5	17.0	17.5	17.0
14	10.5	10.5	---	---	13.5	13.5	15.5	15.5	17.5	17.0	17.5	17.0
15	10.5	10.0	---	---	13.5	13.5	16.0	15.5	17.5	17.0	17.0	17.0
16	10.0	10.0	12.5	12.0	14.0	13.5	15.5	15.5	17.0	17.0	17.0	17.0
17	10.5	10.0	13.0	12.0	14.0	13.5	16.0	15.5	17.5	17.0	17.0	17.0
18	10.5	10.5	13.0	13.0	14.0	13.5	16.0	16.0	17.5	17.5	17.0	17.0
19	11.0	10.5	13.0	13.0	14.0	13.5	16.0	16.0	17.5	17.0	17.5	17.0
20	11.0	10.5	13.5	13.0	13.5	13.5	16.5	16.0	17.5	17.0	17.0	17.0
21	11.0	11.0	13.5	13.0	14.0	13.5	16.5	16.0	17.5	17.5	17.0	17.0
22	11.0	11.0	---	---	14.0	14.0	16.5	16.5	17.5	17.5	17.0	17.0
23	11.0	10.5	---	---	14.0	14.0	16.5	16.5	17.5	17.5	17.0	16.5
24	11.0	10.5	---	---	14.0	14.0	16.5	16.5	18.0	17.5	17.0	16.5
25	11.0	10.5	---	---	14.0	14.0	17.0	16.5	17.5	17.5	17.0	16.5
26	11.0	10.5	---	---	14.5	14.0	17.0	17.0	18.0	17.5	17.0	16.5
27	11.5	11.0	---	---	14.5	14.5	17.0	17.0	18.0	17.5	17.0	16.5
28	11.5	11.5	---	---	14.5	14.5	17.0	17.0	17.5	17.5	17.0	16.5
29	11.5	11.5	---	---	14.5	14.5	17.0	17.0	18.0	17.5	17.0	16.5
30	12.0	11.5	---	---	14.5	14.5	17.0	17.0	18.0	17.5	17.0	16.5
31	---	---	---	---	---	---	17.5	17.0	18.0	17.5	---	---
MONTH	12.0	9.5	---	---	---	---	17.5	14.5	18.0	16.5	18.0	16.5

11447030 STRONG RANCH SLOUGH AT SACRAMENTO, CALIF.

LOCATION.--Lat 38°36'09", long 121°23'40", in NE¼SW¼ sec.29, T.9 N., R.5 E., Sacramento County, on right bank 3.0 mi (4.8 km) upstream from mouth, and 1.2 mi (1.9 km) east of Sacramento city limits.

DRAINAGE AREA.--5.02 mi² (13.00 km²).

PERIOD OF RECORD.--October 1972 to current year (winter season only), discontinued.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (12 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 560 ft³/s (15.9 m³/s) Mar. 21 (gage height, 7.00 ft or 2.134 m).
Period of record: Maximum discharge, 708 ft³/s (20.1 m³/s) Feb. 27, 1973 (gage height, 7.74 ft or 2.359 m).

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1974 TO APRIL 1975
(MEAN VALUES)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	.11	.05	.12	22	1.1	.36					
2	3.3	.05	6.7	.15	54	.70	.52					
3	3.5	.07	43	.16	14	1.4	.70					
4	3.5	.07	2.7	.34	25	1.6	6.6					
5	3.3	.08	.16	.47	1.7	12	21					
6	3.6	.07	1.1	8.5	.75	2.6	20					
7	4.2	15	.12	.68	19	16	2.0					
8	3.3	1.3	.11	2.9	15	20	2.4					
9	3.7	.07	.13	.39	72	1.8	.30					
10	3.2	.10	.10	1.2	5.8	6.5	.25					
11	3.6	.06	.11	.40	.64	2.2	.25					
12	4.7	.10	1.4	.38	83	.60	.30					
13	5.5	.08	.31	.35	102	69	.36					
14	5.6	.09	.13	.53	2.2	4.8	.36					
15	4.4	.26	.18	.51	1.7	5.5	.36					
16	3.2	.08	.14	.29	1.4	8.2	10					
17	3.4	.07	.09	.28	1.1	.94	1.4					
18	3.3	.69	.10	.59	.90	1.6	.52					
19	3.4	.11	.11	.34	4.0	1.4	.52					
20	3.1	.10	.23	.34	3.2	.70	.60					
21	3.5	16	.12	.12	2.4	90	1.1					
22	2.8	.24	.11	.15	1.8	6.3	.36					
23	2.8	.09	.13	.26	1.4	2.6	2.4					
24	2.3	.12	.10	.14	1.1	28	5.7					
25	2.8	.69	.11	.16	.94	15	.70					
26	3.5	.17	.13	.15	1.1	.70	.25					
27	22	.12	29	.20	1.2	.52	.16					
28	14	.06	61	2.8	1.6	.60	.36					
29	.16	.06	.48	.57	---	.36	.30					
30	.19	.07	.23	.29	---	.44	.52					
31	16	---	.14	23	---	.36	---					
TOTAL	147.75	36.18	148.52	46.76	440.93	303.52	78.65					
MEAN	4.77	1.21	4.79	1.51	15.7	9.79	2.62					
MAX	22	16	61	23	102	90	21					
MIN	.16	.05	.05	.12	.64	.36	.16					
AC-FT	293	72	295	93	875	602	156					

11447030 STRONG RANCH SLOUGH AT SACRAMENTO, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: August 1972 to current year (winter season only).
Specific conductance: December 1972 to September 1973 (winter season only).
Sediment records: August 1972 to September 1974 (winter season only).

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALKALINITY AS CACO3 (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
OCT.							
27...	2215	156	28	.78	5.5	6.3	.15
27...	2230	161	33	.06	5.3	5.4	.28
27...	2245	159	34	1.0	5.0	6.0	.15
27...	2300	156	30	1.1	4.6	5.7	.15
27...	2315	139	31	1.0	3.7	4.7	.16
27...	2330	122	35	.99	3.5	4.5	.18
27...	2400	90	34	.76	2.6	3.4	.22
28...	0030	61	26	1.1	2.5	3.6	.22
28...	0100	48	25	1.0	2.3	3.3	.24
28...	0200	42	22	.90	1.9	2.8	.22
28...	0300	48	32	.95	2.3	3.3	.28
28...	0500	33	25	.75	1.8	2.6	.22
NOV.							
07...	1230	24	17	.29	2.6	2.9	.25
07...	1235	31	--	.73	3.0	3.7	.32
07...	1245	35	11	.00	3.4	3.4	.48
07...	1250	36	--	.00	2.6	2.6	.39
07...	1300	35	11	.00	1.7	1.7	.30
07...	1315	32	13	.74	2.0	2.7	.14
07...	1325	31	18	.78	2.3	3.1	.16
07...	1340	46	18	.70	1.8	2.5	.18
07...	1355	62	33	.74	2.4	3.1	.01
07...	1415	68	25	.63	2.6	3.2	.20
07...	1430	65	21	.72	2.5	3.2	.21
07...	1445	62	19	.67	2.1	2.8	.22
07...	1515	53	17	.65	1.9	2.6	.21
07...	1545	43	18	.60	1.4	2.0	.22
07...	1615	33	19	.57	1.7	2.3	.23
07...	1715	34	18	.55	1.3	1.9	.22
07...	1730	37	18	.51	1.3	1.8	.20
07...	2035	12	20	.49	1.2	1.7	.22
FEB.							
12...	0940	.52	80	1.1	1.5	2.6	.03
12...	1005	1.2	82	1.0	1.3	2.3	.13
12...	1025	2.2	148	.97	1.4	2.4	.19
12...	1045	4.8	100	1.3	1.3	2.6	.21
12...	1100	6.4	100	1.9	1.5	3.4	.28
12...	1130	8.8	52	1.5	1.3	2.8	.18
12...	1145	11	40	1.6	1.4	3.0	.20
12...	1200	15	--	.70	1.2	1.9	.17
12...	1215	19	30	.65	1.2	1.9	.14
12...	1230	32	30	1.2	.54	1.7	.14
12...	1245	42	28	.53	.68	1.2	.16
12...	1300	52	46	.82	.37	1.2	.18
12...	1315	67	48	.86	.49	1.4	.22
12...	1330	82	33	1.2	.28	1.5	.21
12...	1345	87	26	.49	.17	.66	.20
12...	1400	88	25	.42	.73	1.2	.19
12...	1430	87	28	.42	.59	1.0	.20
12...	1500	78	27	.40	.46	.86	.19

11447030 STRONG RANCH SLOUGH AT SACRAMENTO, CALIF.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SUS- PENDED SOLIDS (MG/L)	SETTLE- ABLE MATTER (ML/L /HR)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT.							
27...	346	2.5	100	6.8	17.0	220	42
27...	369	2.5	101	6.8	16.5	220	--
27...	340	3.5	94	7.0	16.5	180	--
27...	338	--	85	7.1	16.0	170	--
27...	248	1.8	84	7.1	16.0	160	31
27...	212	1.8	84	7.1	16.0	140	--
27...	172	--	84	7.1	16.0	120	29
28...	95	--	86	7.3	16.0	110	--
28...	83	1.1	85	7.2	16.0	100	25
28...	51	--	79	7.1	16.0	81	27
28...	66	.8	98	7.1	15.5	90	23
28...	29	--	85	6.8	16.0	75	16
NOV.							
07...	138	1.5	111	6.4	14.5	120	31
07...	192	1.5	--	--	--	120	--
07...	180	1.3	102	6.5	14.5	110	--
07...	156	1.4	--	--	--	110	--
07...	118	1.0	66	6.2	14.5	100	--
07...	90	.8	63	6.8	14.5	84	--
07...	14	.9	65	7.2	14.5	94	22
07...	37	2.0	71	7.3	14.5	89	--
07...	164	1.0	154	7.3	14.5	120	--
07...	140	1.9	106	7.3	14.5	99	20
07...	32	1.4	78	7.4	14.5	90	20
07...	82	1.3	81	7.1	14.5	47	--
07...	66	1.1	66	7.1	14.5	74	16
07...	75	1.0	66	7.1	14.5	64	--
07...	84	.7	67	7.2	14.5	57	14
07...	20	.7	62	7.2	14.5	54	12
07...	58	.4	62	7.2	14.5	56	--
07...	43	.5	64	7.4	13.0	44	7.1
FEB.							
12...	38	.0	267	7.0	11.0	60	12
12...	18	.0	178	6.8	11.0	61	--
12...	20	.0	274	7.4	11.0	81	--
12...	28	.0	208	6.5	10.5	33	4.2
12...	26	.1	202	6.3	--	32	6.1
12...	58	.0	137	7.1	11.0	45	--
12...	52	.2	99	7.1	11.0	49	--
12...	52	.2	89	7.2	11.0	54	--
12...	76	.2	71	7.0	11.0	51	--
12...	104	.4	64	6.9	11.0	45	--
12...	100	.4	67	7.0	11.0	49	4.9
12...	80	--	99	7.3	11.0	40	7.7
12...	93	.5	116	7.3	11.0	39	--
12...	114	--	79	7.3	11.0	47	6.5
12...	116	.4	58	7.2	11.0	46	5.8
12...	100	.5	52	7.2	11.0	46	--
12...	109	.5	55	7.2	11.0	45	--
12...	84	.4	53	7.1	11.0	56	6.7

11447360 ARCADE CREEK NEAR DEL PASO HEIGHTS, CALIF.

LOCATION.--Lat 38°38'28", long 121°22'38", in Del Paso Grant, Sacramento County, on right bank 1,200 ft (366 m) upstream from bridge on Interstate Highway 80, and 1.6 mi (2.6 km) east of city limits of Del Paso Heights.

DRAINAGE AREA.--31.5 mi² (81.6 km²).

PERIOD OF RECORD.--July 1963 to current year.

GAGE.--Water-stage recorder and concrete low-water control. Datum of gage is 47.98 ft (14.624 m) above mean sea level (levels by county of Sacramento).

AVERAGE DISCHARGE.--12 years, 18.0 ft³/s (0.510 m³/s), 13,040 acre-ft/yr (16.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,300 ft³/s (36.8 m³/s) Feb. 13 (gage height, 12.65 ft or 3.856 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Nov. 17.

Period of record: Maximum discharge, 2,170 ft³/s (61.5 m³/s) Feb. 27, 1973 (gage height, 14.29 ft or 4.356 m); maximum gage height, 14.42 ft (4.395 m) Jan. 21, 1967; no flow for several days in 1963-66, 1971-73.

REMARKS.--Records fair. Low summer flow sustained by residential and industrial waste water.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	11	.35	2.0	109	1.2	4.6	2.8	5.3	4.4	5.8	4.3
2	2.1	2.1	1.7	1.6	413	.68	4.6	3.2	4.6	5.0	5.8	4.6
3	2.1	1.1	133	1.5	135	.84	2.9	2.8	4.6	5.0	5.6	4.3
4	2.1	.69	100	1.8	191	1.0	5.9	2.6	5.8	5.0	5.8	4.4
5	1.8	.45	7.2	2.1	20	35	89	3.0	5.9	4.5	5.3	4.8
6	2.1	.36	3.0	34	7.9	19	126	3.2	6.5	5.1	4.9	4.8
7	2.0	41	2.1	11	52	66	17	3.1	5.7	5.7	5.5	5.0
8	1.8	34	1.5	44	49	300	5.7	3.3	6.0	5.2	5.7	4.9
9	1.6	3.5	1.8	8.4	401	84	3.7	3.4	6.0	5.0	5.6	3.8
10	1.9	1.3	2.1	3.5	67	68	3.1	3.5	6.3	4.7	5.6	3.8
11	1.7	.77	1.3	1.7	9.2	52	3.6	3.3	6.7	4.4	5.5	4.7
12	1.6	.50	1.5	1.2	250	40	2.9	3.7	5.8	4.1	5.1	4.5
13	1.7	.38	2.1	.95	829	241	2.7	4.4	7.6	3.9	5.1	4.4
14	1.9	.36	.93	1.2	270	133	2.5	4.3	7.1	4.3	5.0	4.4
15	2.0	.30	.59	1.0	110	11	2.6	3.2	6.0	4.2	5.3	4.5
16	2.1	.24	.38	1.0	30	54	6.3	3.9	5.3	4.1	5.5	4.6
17	2.0	.20	.67	.95	14	9.0	3.9	4.1	5.6	3.9	5.0	4.4
18	1.8	1.7	.97	.81	6.6	4.4	2.3	4.5	8.3	3.8	8.8	4.6
19	1.6	1.4	1.1	.72	66	3.9	2.2	4.4	6.1	3.7	16	4.2
20	1.7	.46	1.2	.95	41	3.3	2.5	3.4	5.6	3.5	5.3	4.2
21	1.6	54	.75	.68	22	172	2.7	3.4	6.1	4.4	4.0	4.5
22	1.2	16	.40	1.2	10	319	2.8	5.0	5.9	4.2	3.8	4.7
23	1.2	2.7	.24	1.6	3.2	11	6.8	5.9	5.7	4.7	4.6	4.2
24	1.0	1.1	.40	.67	3.0	72	15	6.3	4.8	5.1	4.6	4.2
25	1.4	2.2	1.1	.46	2.0	248	11	6.1	4.7	4.7	5.3	4.4
26	1.4	1.4	.49	.61	1.5	14	3.4	5.5	5.9	4.4	5.4	4.2
27	2.9	.78	59	.64	1.5	5.3	2.5	6.4	6.5	4.1	4.4	4.0
28	88	.39	322	1.7	1.5	3.8	2.7	6.6	5.9	5.6	3.9	4.2
29	6.5	.32	20	2.8	---	3.8	2.5	5.8	5.4	6.1	4.3	4.0
30	1.8	.57	5.8	1.0	---	3.7	2.9	6.3	5.3	5.0	4.4	3.6
31	40	---	3.5	27	---	3.3	---	6.0	---	5.1	4.4	---
TOTAL	185.1	181.27	677.17	158.74	3115.4	1983.22	346.3	133.4	177.0	142.9	171.3	131.2
MEAN	5.97	6.04	21.8	5.12	111	64.0	11.5	4.30	5.90	4.61	5.53	4.37
MAX	88	54	322	44	829	319	126	6.6	8.3	6.1	16	5.0
MIN	1.0	.20	.24	.46	1.5	.68	2.2	2.6	4.6	3.5	3.8	3.6
AC-FT	367	360	1340	315	6180	3930	687	265	351	283	340	260

CAL YR 1974 TOTAL 4882.80 MEAN 13.4 MAX 322 MIN .20 AC-FT 9690
WTR YR 1975 TOTAL 7403.00 MEAN 20.3 MAX 829 MIN .20 AC-FT 14680

Peak discharge (base, 500 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-2	0530	10.68	699	3-13	2100	10.44	649
2-13	0700	12.65	1,300	3-21	2330	11.56	932
3-8	unknown	11.26	843				

11447500 SACRAMENTO RIVER AT SACRAMENTO, CALIF.

LOCATION.--Lat 38°35'12", long 121°30'16", Sacramento County, on left bank 1,000 ft (300 m) upstream from I Street Bridge, in city of Sacramento, and 0.5 mi (0.8 km) downstream from American River.

DRAINAGE AREA.--23,508 mi² (60,886 km²).

PERIOD OF RECORD.--January 1904 to July 1905 (gage heights only), June to November 1921, October 1948 to current year. Gage heights collected in this vicinity November 1879 to May 1888, December 1890 to September 1963 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Oct. 15, 1912, nonrecording gage in vicinity of I Street Bridge. Oct. 15, 1912, to Nov. 16, 1956, water-stage recorder at various sites in vicinity of I Street Bridge. Prior to Nov. 16, 1956, datum of gages at low-water mark of Oct. 23, 1856, 0.12 ft (0.037 m) above mean sea level. Auxiliary water-stage recorder on right bank 10.8 mi (17.4 km) downstream near Freeport.

AVERAGE DISCHARGE.--27 years (1948-75), 24,670 ft³/s (698.7 m³/s), 17,870,000 acre-ft/yr (22.0 km³/yr).

EXTREMES.--Current year: Maximum discharge, 74,400 ft³/s (2,110 m³/s) Mar. 26 (elevation, 21.85 ft or 6.660 m); minimum daily, 15,600 ft³/s (442 m³/s) July 11.

Period of record (1948 to current year): Maximum discharge, 104,000 ft³/s (2,950 m³/s) Nov. 21, 1950 (elevation, 30.14 ft or 9.187 m, site and datum then in use); minimum daily, 5,590 ft³/s (158 m³/s) July 20, 1949.

Maximum discharge known prior to Nov. 21, 1950, 103,000 ft³/s (2,920 m³/s) Jan. 17, 1909 (elevation, 29.6 ft or 9.02 m, present datum), from reports of California Department of Water Resources.

REMARKS.--Records excellent. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas. A portion of the flow bypasses station during flood periods through Yolo Bypass (see sta 11426000, 11453000).

COOPERATION.--Records collected and prepared in cooperation with the California Department of Water Resources.

REVISIONS (WATER YEARS).--WRD Calif. 1971: 1966(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21500	18500	29100	22400	17600	30100	62100	29100	25100	16700	19100	21900
2	21600	19000	29200	20700	24300	28000	54900	29200	24900	16500	19200	21800
3	21400	19400	29800	19500	36700	27300	48000	29700	25200	16500	19000	22000
4	21300	18900	30800	19000	40600	26400	42100	30600	25200	16400	18700	22300
5	21500	17800	34400	18900	40400	26200	38900	31300	25600	16300	18900	21800
6	21600	16900	37900	18700	36700	26100	38300	32300	27200	16200	19200	21600
7	21500	16100	36000	19400	33600	25700	38300	31800	29100	16100	19000	21400
8	21600	16200	33400	21900	32900	28500	37300	31000	30300	16200	18700	21100
9	21700	16000	31700	25400	40600	37700	35800	30400	30900	16100	18700	20500
10	21700	16300	30700	27600	47800	42700	35300	30800	30900	15900	18700	20800
11	21800	16900	28900	26600	51100	47800	33800	31500	30400	15600	18500	21200
12	21700	17800	26600	24400	53600	54200	31300	32100	29500	16300	18300	21600
13	21300	18400	25300	22400	62200	57400	29700	32400	28000	17400	18300	21500
14	20700	18700	24700	20800	71300	59000	29000	33400	26100	18600	18500	21400
15	20200	20700	23700	19600	71500	56800	28300	33800	25000	19300	18600	21600
16	19800	22200	23300	18700	71300	53700	28700	34100	24400	19400	18400	21500
17	19700	22700	22700	18300	69500	51300	29700	34600	23900	19800	18300	21200
18	19600	22800	22200	17700	66900	49000	28300	34200	23200	20500	18900	20900
19	19200	23200	21900	17400	63200	47700	27200	33500	21900	20300	19400	20800
20	19300	23800	21200	17100	57300	49300	26600	33800	21000	20000	20000	20700
21	19600	24300	20400	17700	52600	54700	26100	34900	20400	20000	20600	20000
22	20200	26000	20000	17800	49500	65400	25600	33400	19600	19900	21000	19100
23	21200	27300	19800	17800	46700	69300	24800	30800	19200	20300	20900	18800
24	21200	27800	19400	17500	43800	69700	24500	28000	18600	20100	20700	18300
25	19900	28000	19200	17100	41000	71600	25200	25300	17900	19600	20400	18200
26	17400	28400	19100	16900	38700	73800	27300	24100	18000	19600	20500	17900
27	16400	28700	18900	16700	36300	72600	29200	23700	18300	19700	20600	17900
28	16500	29000	20500	16400	32800	71900	29700	24100	17700	19400	20500	17800
29	17200	29200	22800	16300	---	70400	29800	24800	16900	19500	20600	17900
30	17400	29100	26400	15800	---	68600	29400	24700	16900	19400	20800	17900
31	18000	---	25000	15900	---	66300	---	24800	---	19200	21400	---
TOTAL	623700	660100	795000	602400	1330500	1579200	995200	938200	711300	566800	604400	611400
MEAN	20120	22000	25650	19430	47520	50940	33170	30260	23710	18280	19500	20380
MAX	21800	29200	37900	27600	71500	73800	62100	34900	30900	20500	21400	22300
MIN	16400	16000	18900	15800	17600	25700	24500	23700	16900	15600	18300	17800
AC-FT	1237000	1309000	1577000	1195000	2639000	3132000	1974000	1861000	1411000	1124000	1199000	1213000

CAL YR 1974 TOTAL 13664300 MEAN 37440 MAX 94200 MIN 16000 AC-FT 27100000
WTR YR 1975 TOTAL 10018200 MEAN 27450 MAX 73800 MIN 15600 AC-FT 19870000

11447500 SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: January to December 1906, December 1907 to December 1908, water years 1951-52 (partial-record station), October 1952 to May 1960. Published as "above Sacramento" in 1906-8.
Water temperatures: May 1955 to current year.
Sediment records: October 1956 to current year.
Turbidity: October 1971 to current year.

EXTREMES.--Current year:
Sediment concentrations: Maximum daily, 569 mg/l Feb. 10; minimum daily, 21 mg/l Dec. 26.
Sediment discharge: Maximum daily, 76,400 tons (69,310 tonnes) Mar. 12; minimum daily, 1,080 tons (980 tonnes) Dec. 26.
Period of record:
Water temperatures: Maximum (1955-62, 1963-66, 1967-74), 28.0°C on several days in 1969 and 1970; minimum (1955-74), 3.0°C Dec. 14, 1973.
Sediment concentrations: Maximum daily, 1,960 mg/l Dec. 24, 1964; minimum daily, 11 mg/l Nov. 30, 1959 (estimated), and Nov. 28, 1969.
Sediment discharge: Maximum daily, 525,000 tons (476,000 tonnes) Dec. 24, 1964; minimum daily, 200 tons (181 tonnes), estimated, Dec. 14, 1959.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975 (ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	---	---	---	---	12.0	11.0	---	---	20.0	---	---
2	19.5	13.0	---	---	7.5	11.5	---	---	19.5	---	---	20.5
3	19.5	12.0	---	6.5	7.5	13.0	---	---	19.5	19.5	---	21.0
4	---	12.5	10.5	---	7.0	11.5	10.0	14.0	20.5	---	---	21.0
5	---	13.0	11.5	---	8.0	12.0	---	14.5	20.0	20.5	---	---
6	---	14.0	10.0	7.5	7.5	11.0	---	14.0	---	21.0	---	---
7	27.0	13.5	9.5	7.0	---	---	10.0	15.0	---	21.5	---	---
8	17.5	13.0	9.0	7.5	---	---	10.0	---	---	22.0	---	20.0
9	17.0	12.5	---	8.0	---	11.0	12.0	15.0	20.5	---	---	20.0
10	17.0	12.0	9.0	6.0	10.5	---	12.0	---	20.5	---	---	20.0
11	18.0	13.5	8.5	---	10.0	11.0	13.0	---	19.5	22.0	---	21.0
12	17.5	---	---	---	10.5	---	15.0	16.0	20.0	---	---	---
13	17.0	14.5	---	---	10.5	10.0	---	17.5	21.0	---	---	---
14	18.0	14.5	10.0	---	10.0	10.0	13.0	15.0	---	21.5	---	---
15	18.0	13.0	9.5	6.5	10.0	10.0	12.5	16.0	---	21.5	---	21.0
16	18.0	12.0	---	8.0	---	---	---	16.0	19.5	21.0	20.0	21.0
17	18.0	13.0	9.0	---	---	9.5	12.5	16.0	19.5	21.0	---	21.0
18	18.0	12.0	---	---	9.5	11.0	12.0	---	---	21.0	19.5	21.0
19	---	12.0	9.0	7.5	8.5	10.0	---	17.0	18.0	---	20.5	21.0
20	---	11.5	8.0	7.5	9.0	10.0	---	16.0	---	---	21.0	---
21	19.0	10.5	---	7.5	---	10.0	14.0	---	---	22.0	20.5	---
22	17.0	13.0	8.0	8.5	8.5	---	13.5	17.0	19.5	23.0	20.5	---
23	18.0	---	---	8.0	9.0	10.0	14.0	---	18.0	23.0	---	---
24	---	---	---	9.5	9.0	10.0	---	---	18.0	24.0	---	---
25	15.0	11.0	---	---	10.0	10.0	12.5	---	19.5	---	---	---
26	---	11.0	7.0	---	11.0	9.5	---	---	19.5	---	20.0	---
27	---	10.5	7.0	8.0	12.5	10.5	---	19.0	---	---	20.0	---
28	14.5	---	6.5	7.5	---	10.0	14.0	19.5	---	22.0	20.0	---
29	14.0	11.0	6.0	7.0	---	---	14.0	20.0	19.5	---	20.5	20.0
30	---	11.0	---	7.5	---	---	15.0	---	20.0	22.5	---	---
31	---	---	---	---	---	11.0	---	---	---	21.0	---	---
MONTH	---	12.5	---	---	---	---	---	---	---	---	---	---

11447500 SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	21500	30	1740	18500	43	2150	29100	49	3850
2	21600	30	1750	19000	44	2260	29200	52	4100
3	21400	27	1560	19400	55	2880	29800	58	4670
4	21300	26	1500	18900	54	2760	30800	70	5820
5	21500	28	1630	17800	36	1730	34400	100	9290
6	21600	29	1690	16900	32	1460	37900	205	21000
7	21500	30	1740	16100	32	1390	36000	120	11700
8	21600	31	1810	16200	29	1270	33400	87	7850
9	21700	30	1760	16000	33	1430	31700	63	5390
10	21700	29	1700	16300	35	1540	30700	46	3810
11	21800	37	2180	16900	40	1830	28900	40	3120
12	21700	32	1870	17800	43	2070	26600	39	2800
13	21300	32	1840	18400	43	2140	25300	38	2600
14	20700	38	2120	18700	41	2070	24700	37	2470
15	20200	36	1960	20700	54	3020	23700	40	2560
16	19800	34	1820	22200	55	3300	23300	40	2520
17	19700	31	1650	22700	56	3430	22700	38	2330
18	19600	32	1690	22800	52	3200	22200	37	2220
19	19200	34	1760	23200	47	2940	21900	34	2010
20	19300	36	1880	23000	56	3470	21200	29	1660
21	19600	38	2010	24300	45	2950	20400	32	1760
22	20200	39	2130	26000	57	4000	20000	35	1890
23	21200	42	2400	27300	59	4350	19800	32	1710
24	21200	48	2750	27800	61	4580	19400	26	1360
25	19900	51	2740	28000	63	4760	19200	22	1140
26	17400	50	2350	28400	57	4370	19100	21	1080
27	16400	47	2080	28700	51	3950	18900	45	2300
28	16500	45	2000	29000	52	4070	20500	47	2600
29	17200	41	1900	29200	53	4180	22800	105	6460
30	17400	41	1930	29100	51	4010	26400	86	6130
31	18000	42	2040	---	---	---	25000	48	3240
MONTH	623700	---	59980	660100	---	87560	795000	---	131440

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	22400	32	1940	17600	34	1620	30100	112	9100
2	20700	27	1510	24300	158	10400	28000	97	7330
3	19500	26	1370	36700	369	36600	27300	112	8260
4	19000	27	1390	40600	238	26100	26400	110	7840
5	18900	27	1380	40400	171	18700	26200	90	6370
6	18700	28	1410	36700	129	12800	26100	102	7190
7	19400	29	1520	33600	102	9250	25700	118	8190
8	21900	38	2250	32900	107	9500	28500	128	9850
9	25400	71	4870	40600	299	32800	37700	139	14100
10	27600	112	8350	47800	569	73400	42700	218	25100
11	26600	64	4600	51100	445	61400	47800	443	57200
12	24400	48	3160	53600	280	40500	54200	522	76400
13	22400	44	2660	62200	255	42800	57400	281	43500
14	20800	38	2130	71300	296	57000	59000	191	30400
15	19600	32	1690	71500	244	47100	56800	182	27900
16	18700	26	1310	71300	243	46800	53700	169	24500
17	18300	25	1240	69500	229	43000	51300	146	20200
18	17700	27	1290	66900	201	36300	49000	131	17300
19	17400	28	1320	63200	163	27800	47700	135	17400
20	17100	26	1200	57300	143	22100	49300	178	23700
21	17700	28	1340	52600	136	19300	54700	412	60800
22	17800	27	1300	49500	128	17100	65400	295	52100
23	17800	28	1350	46700	153	19300	69300	203	38000
24	17500	26	1230	43800	155	18300	69700	193	36300
25	17100	27	1250	41000	143	15800	71600	281	54300
26	16900	32	1460	38700	122	12700	73800	205	40800
27	16700	35	1580	36300	116	11400	72600	171	33500
28	16400	33	1460	32800	114	10100	71900	221	42900
29	16300	27	1190	---	---	---	70400	209	39700
30	15800	26	1110	---	---	---	68600	119	22000
31	15900	30	1290	---	---	---	66300	190	34000
MONTH	602400	---	61150	1330500	---	779970	1579200	---	896230

11447500 SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	62100	180	30200	29100	78	6130	25100	52	3520
2	54900	175	25900	29200	78	6150	24900	49	3290
3	48000	169	21900	29700	78	6250	25200	46	3130
4	42100	165	18800	30600	77	6360	25200	47	3200
5	38900	148	15500	31300	76	6420	25600	42	2900
6	38300	128	13200	32300	79	6890	27200	40	2940
7	38300	117	12100	31800	70	6010	29100	44	3460
8	37300	110	11100	31000	59	4940	30300	55	4500
9	35800	98	9470	30400	53	4350	30900	60	5010
10	35300	98	9340	30800	55	4570	30900	58	4840
11	33800	92	8400	31500	68	5780	30400	49	4020
12	31300	105	8870	32100	83	7190	29500	47	3740
13	29700	107	8580	32400	90	7870	28000	51	3860
14	29000	98	7670	33400	55	4960	26100	52	3660
15	28300	92	7030	33800	66	6020	25000	51	3440
16	28700	85	6590	34100	93	8560	24400	49	3230
17	29700	81	6500	34600	98	9160	23900	45	2900
18	28300	77	5880	34200	105	9700	23200	50	3130
19	27200	70	5140	33500	113	10200	21900	57	3370
20	26600	66	4740	33800	113	10300	21000	57	3230
21	26100	66	4650	34900	111	10500	20400	57	3140
22	25600	66	4560	33400	108	9740	19600	56	2960
23	24800	61	4080	30800	103	8570	19200	55	2850
24	24500	59	3900	28000	96	7260	18600	53	2660
25	25200	60	4080	25300	88	6010	17900	52	2510
26	27300	65	4790	24100	80	5210	18000	55	2670
27	29200	81	6390	23700	72	4610	18300	57	2820
28	29700	110	8820	24100	65	4230	17700	57	2720
29	29800	104	8370	24800	58	3880	16900	58	2650
30	29400	83	6590	24700	56	3730	16900	52	2370
31	---	---	---	24800	53	3550	---	---	---
MONTH	995200	---	293140	938200	---	205100	711300	---	98720

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	16700	45	2030	19100	36	1860	21900	65	3840
2	16500	41	1830	19200	36	1870	21800	65	3830
3	16500	43	1920	19000	36	1850	22000	70	4160
4	16400	48	2130	18700	36	1820	22300	71	4270
5	16300	51	2240	18900	36	1840	21800	70	4120
6	16200	52	2270	19200	37	1920	21600	70	4080
7	16100	46	2000	19000	37	1900	21400	69	3990
8	16200	43	1880	18700	37	1870	21100	67	3820
9	16100	38	1650	18700	38	1920	20500	65	3600
10	15900	34	1460	18700	38	1920	20800	60	3370
11	15600	32	1350	18500	37	1850	21200	60	3430
12	16300	33	1450	18300	37	1830	21600	58	3380
13	17400	38	1790	18300	37	1830	21500	49	2840
14	18600	43	2160	18500	37	1850	21400	43	2480
15	19300	47	2450	18600	37	1860	21600	41	2390
16	19400	48	2510	18400	37	1840	21500	48	2790
17	19800	41	2190	18300	37	1830	21200	52	2980
18	20500	41	2270	18900	38	1940	20900	52	2930
19	20300	44	2410	19400	41	2150	20800	47	2640
20	20000	45	2430	20000	56	3020	20700	42	2350
21	20000	47	2540	20600	60	3340	20000	42	2270
22	19900	47	2530	21000	53	3010	19100	43	2220
23	20300	43	2360	20900	50	2820	18800	43	2180
24	20100	40	2170	20700	52	2910	18300	44	2170
25	19600	40	2120	20400	54	2970	18200	44	2160
26	19600	41	2170	20500	56	3100	17900	45	2170
27	19700	41	2180	20600	53	2950	17900	45	2170
28	19400	42	2200	20500	47	2600	17800	45	2160
29	19500	40	2110	20600	60	3340	17900	45	2170
30	19400	36	1890	20800	64	3590	17900	45	2170
31	19200	35	1810	21400	64	3700	---	---	---
MONTH	566800	---	64500	604400	---	73100	611400	---	89130
YEAR	10018200		2040020						

11447500 SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM
FEB.										
05...	1140	8.0	--	40500	168	18400	--	--	--	--
14...	1115	10.0	--	71700	289	55900	26	35	43	55
18...	1050	8.5	--	66900	200	36100	35	45	51	57
20...	1430	9.0	--	56000	161	24300	29	36	44	56
MAR.										
14...	1115	10.0	--	59300	204	32700	33	41	48	55
21...	0920	10.0	--	53600	400	57900	25	34	43	53
24...	1040	10.0	--	69900	184	34700	35	46	52	58
27...	1420	10.5	--	72800	163	32000	28	42	50	56
APR.										
01...	1525	11.0	--	61500	179	29700	27	36	45	56
SEP.										
29...	1230	18.0	17900	--	34	1640	--	--	--	--

DATE	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
FEB.										
05...	--	--	71	--	92	--	98	--	99	100
14...	65	73	--	87	--	98	--	100	--	--
18...	63	69	--	83	--	99	--	100	--	--
20...	69	--	75	--	87	--	96	--	100	100
MAR.										
14...	62	--	69	--	82	--	95	--	100	--
21...	62	--	70	--	82	--	97	--	100	--
24...	60	--	63	--	74	--	90	--	100	--
27...	58	--	60	--	69	--	91	--	100	--
APR.										
01...	68	--	76	--	86	--	96	--	100	--
SEP.										
29...	--	--	93	--	98	--	100	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER-ATURE (DEG C)	NUMBER OF SAM-PLING POINTS	INSTAN-TANEOUS DIS-CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM
JULY											
31...	1325	21.0	5	19200	4	9	41	98	100	100	--
31...	1330	--	--	--	--	0	8	92	99	100	--
31...	1332	--	--	--	--	0	3	77	96	99	100
31...	1335	--	--	--	0	1	3	67	96	100	--
31...	1340	--	--	--	10	22	33	76	95	100	--

11447500 SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRTION AND TURBIDITY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- CHARGE (CFS)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	TUR- BID- ITY (JTU)
OCT.					
01...	1745	21500	--	29	10
02...	1730	21600	--	30	10
03...	1720	21400	--	25	8
07...	1730	21500	--	30	10
08...	1730	21600	--	31	9
09...	1230	21700	--	30	7
10...	1250	21700	--	28	5
11...	1230	21800	--	40	4
12...	1910	21700	--	30	4
13...	1740	21300	--	33	5
14...	1730	20700	--	49	9
15...	1720	20200	--	34	6
16...	1730	19800	--	34	6
17...	1230	19700	--	31	7
18...	1230	19600	--	32	2
21...	1745	19600	--	38	2
22...	1730	20200	--	39	8
23...	1730	21200	--	43	15
25...	1230	19900	--	52	10
28...	1730	16500	--	44	10
29...	1730	17200	--	40	8
NOV.					
02...	1730	19000	--	44	10
03...	2300	19400	--	76	10
04...	2040	18900	--	40	15
05...	1730	17800	--	34	8
06...	1220	16900	--	32	8
07...	1230	16100	--	32	10
08...	1215	16200	--	28	9
09...	1830	16000	--	35	10
10...	2200	16300	--	34	3
11...	1215	16900	--	40	8
13...	1215	18400	--	44	9
14...	1730	18700	--	38	8
15...	1215	20700	--	56	6
16...	2300	22200	--	54	8
17...	2330	22700	--	57	9
18...	1745	22800	--	50	7
19...	1745	23200	--	45	5
20...	1745	23800	--	57	6
21...	1730	24300	--	40	7
22...	0830	26000	--	60	8
22...	1215	26000	--	58	10
25...	1730	28000	--	62	7
26...	1745	28400	--	54	6
27...	1745	28700	--	50	7
29...	1730	29200	--	53	7
30...	1330	29100	--	50	7
DEC.					
04...	2130	30800	--	68	9
05...	1530	34400	--	102	10
06...	2330	37900	--	266	80
07...	2230	36000	--	128	25
08...	2330	33400	--	89	15
10...	2315	30700	--	46	9
11...	2230	28900	--	40	9
14...	1900	24700	--	36	8
15...	1900	23700	--	41	9
17...	2200	22700	--	38	10
19...	1745	21900	--	33	7
20...	2330	21200	--	29	8
22...	2300	20000	--	35	8
26...	1745	19100	--	18	7
27...	2230	18900	--	50	15
28...	2300	20500	--	46	15
29...	2345	22800	--	108	20
JAN.					
03...	1745	19500	--	26	10
06...	1745	18700	--	28	8
07...	1745	19400	--	28	7
08...	1745	21900	--	42	10
09...	1745	25400	--	80	20
10...	1730	27600	--	102	25
15...	1745	19600	--	31	10
16...	1745	18700	--	25	8
19...	1815	17400	--	28	9
20...	1735	17100	--	26	9
21...	1745	17700	--	30	9
22...	1745	17800	--	26	10
23...	1745	17800	--	28	10
JAN.					
24...	1745	17500	--	24	10
27...	1745	16700	--	36	10
28...	1745	16400	--	32	10
29...	1745	16300	--	24	8
30...	1745	15800	--	25	7
FEB.					
02...	1915	24300	--	322	120
03...	1735	--	39200	356	120
04...	0815	--	41100	257	80
05...	1140	--	40500	168	70
05...	1835	--	39500	158	60
06...	1740	--	36000	126	60
10...	1800	--	48200	297	80
11...	1730	--	51000	546	200
12...	1100	--	53300	261	80
13...	1730	--	65400	264	90
14...	1115	--	71700	289	75
14...	1215	--	71900	308	100
15...	1730	--	71200	243	100
18...	1050	--	66900	200	100
18...	1740	--	66300	210	80
19...	1745	--	62100	163	60
20...	1430	--	56000	161	60
22...	1015	--	49900	134	40
23...	1800	--	45300	172	60
24...	1740	--	41800	165	50
25...	1745	--	39000	135	40
26...	2030	--	36900	125	40
27...	2100	36300	--	124	40
MAR.					
01...	2300	30100	--	110	30
02...	2230	28000	--	84	25
03...	2300	27300	--	134	30
04...	1745	26400	--	90	30
05...	2300	26200	--	90	25
06...	2300	26100	--	116	50
09...	2130	--	41000	145	80
11...	1730	--	49200	462	180
13...	2330	--	59400	300	100
14...	1030	--	59200	165	120
14...	1115	--	59300	204	70
15...	1745	--	56000	196	80
17...	1745	--	50800	150	40
18...	1745	--	49000	127	35
19...	1745	--	48000	125	30
20...	1745	--	50300	440	120
21...	0920	--	53600	400	120
23...	1610	--	69200	192	100
24...	1040	--	69900	184	60
24...	1745	--	69500	202	80
25...	1000	--	71100	297	100
25...	1745	--	72000	309	90
26...	1745	--	73600	242	50
27...	1420	--	72800	163	50
27...	1745	--	72100	186	45
28...	1745	--	71800	243	100
31...	1745	--	66100	205	50
APR.					
01...	1525	--	61500	179	50
01...	1745	--	61000	220	50
04...	1745	--	41100	180	40
07...	1745	--	37900	125	25
08...	1745	--	36200	119	20
09...	1745	35800	--	103	15
10...	1745	35300	--	110	20
11...	1745	33800	--	84	20
12...	1520	31300	--	110	20
14...	1745	29000	--	97	25
15...	1745	28300	--	90	20
17...	1745	29700	--	88	15
18...	0830	28300	--	86	20
21...	1745	26100	--	73	15
22...	1745	25600	--	73	15
23...	1745	24800	--	58	15
25...	1745	25200	--	66	15
28...	1745	29700	--	130	25
29...	1745	29800	--	108	20
30...	1745	29400	--	86	20
MAY					
05...	1745	31300	--	84	15

11447500 SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	TUR-BID-ITY (JTU)
MAY					
06...	1745	32300	--	88	15
07...	1745	31800	--	74	15
09...	1745	30400	--	56	15
12...	1745	32100	--	86	10
13...	1745	32400	--	94	6
14...	1245	33400	--	46	4
15...	1745	33800	--	73	6
16...	1745	34100	--	98	9
17...	1545	34600	--	98	20
19...	1745	33500	--	114	5
20...	1645	33800	--	112	9
22...	1745	33400	--	108	7
27...	1745	23700	--	71	15
28...	1745	24100	--	64	15
29...	1745	24800	--	57	15
JUNE					
02...	1745	24900	--	49	15
03...	1745	25200	--	45	10
04...	1745	25200	--	47	10
05...	1745	25600	--	41	10
09...	1745	30900	--	60	10
10...	1745	30900	--	56	10
11...	1745	30400	--	48	9
12...	1745	29500	--	48	8
13...	1745	28000	--	52	10
16...	1745	24400	--	47	10
17...	1745	23900	--	45	10
19...	1745	21900	--	57	15
22...	1945	19600	--	55	15
23...	1745	19200	--	56	15
24...	1745	18600	--	51	15
25...	1745	17900	--	53	10
26...	1745	18000	--	56	15
29...	1930	16900	--	58	15
30...	1745	16900	--	50	7
JULY					
01...	1745	16700	--	46	10
02...	1745	16500	--	40	9
05...	1710	16300	--	52	10
06...	1630	16200	--	52	15

DATE	TIME	DIS-CHARGE (CFS)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	TUR-BID-ITY (JTU)
JULY					
07...	1745	16100	--	44	10
08...	1745	16200	--	42	10
11...	1745	15600	--	32	2
14...	1745	18600	--	44	8
15...	1745	19300	--	41	9
16...	1745	19400	--	49	10
17...	1745	19800	--	38	8
18...	1745	20500	--	42	10
21...	1745	20000	--	47	10
22...	1745	19900	--	46	10
23...	1745	20300	--	42	8
24...	1745	20100	--	40	8
28...	1745	19400	--	42	10
30...	1745	19400	--	34	7
31...	1430	19200	--	36	8
AUG.					
16...	1515	18400	--	37	10
18...	1745	18900	--	38	8
19...	1745	19400	--	42	12
20...	1745	20000	--	60	15
21...	1745	20600	--	60	15
22...	1745	21000	--	48	5
26...	1745	20500	--	56	10
27...	1745	20600	--	52	15
28...	1745	20500	--	44	10
29...	1745	20600	--	64	15
SEP.					
02...	1745	21800	--	65	15
03...	1745	22000	--	72	15
04...	1745	22300	--	70	15
08...	1745	21100	--	66	15
09...	1745	20500	--	64	15
10...	1745	20800	--	58	10
11...	1745	21200	--	61	10
15...	1745	21600	--	40	10
16...	1745	21500	--	52	15
17...	1745	21200	--	52	15
18...	1745	20900	--	52	15
19...	1745	20800	--	44	10
29...	1230	17900	--	34	10
29...	1745	17900	--	45	10

11447650 SACRAMENTO RIVER AT FREEPORT, CALIF.

(National stream-quality accounting network and radiochemical station)

LOCATION.--Lat 38°27'20", long 121°30'07", in SE¼SE¼ sec.14, T.7 N., R.4 E., Sacramento County, at drawbridge at Freeport, approximately 11 mi (18 km) south of Sacramento.

PERIOD OF RECORD.--Chemical analyses: Water year 1959 (partial-record station), June 1960 to June 1971, water year 1972 (partial-record station), February 1973 to current year.
Specific conductance: February 1974 to July 1975 (discontinued).
Water temperatures: June 1960 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 23.5°C July 26; minimum, 5.5°C Jan. 1, 2.
Period of record:
Water temperatures: Maximum, 24.0°C June 16, 17, 1961, July 14-16, 1972; minimum, 4.5°C Dec. 12-15, 1972.

REMARKS.--Records of discharge given for Sacramento River at Sacramento (11447500). Temperature recorder located on right bank 1.9 mi (3.1 km) northwest of Freeport, and 7.5 mi (12.1 km) southwest of State Capitol building in Sacramento.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	SUS-PENDED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)
OCT.										
09...	1045	21700	--	--	--	--	--	--	--	--
NOV.										
19...	1045	23200	18	1200	30	50	50	0	9.7	4.1
DEC.										
11...	1200	28900	--	--	--	--	--	--	--	--
JAN.										
15...	1400	19600	--	--	--	--	--	--	--	--
FEB.										
12...	1030	53600	15	20000	50	390	390	0	11	5.4
MAR.										
12...	1030	54200	--	--	--	--	--	--	--	--
APR.										
16...	1000	28700	--	--	--	--	--	--	--	--
MAY										
13...	1030	32400	16	2400	10	80	80	0	10	4.7
JUNE										
11...	1100	30400	--	--	--	--	--	--	--	--
JULY										
16...	1030	19400	--	--	--	--	--	--	--	--
AUG.										
18...	1100	18900	18	1600	30	60	40	20	11	6.5
SEP.										
17...	1100	21200	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)
OCT.										
09...	--	--	--	--	--	--	--	--	.05	.46
NOV.										
19...	6.7	1.0	59	--	48	5.4	3.9	.1	.11	.16
DEC.										
11...	--	--	--	--	--	--	--	--	.11	.24
JAN.										
15...	--	--	--	--	--	--	--	--	.00	--
FEB.										
12...	6.0	1.6	54	--	44	7.3	3.9	.1	.21	.81
MAR.										
12...	--	--	--	--	--	--	--	--	.10	.33
APR.										
16...	--	--	--	--	--	--	--	--	.12	.19
MAY										
13...	7.2	1.3	54	0	44	5.8	3.5	.1	.05	.26
JUNE										
11...	--	--	--	--	--	--	--	--	.04	.22
JULY										
16...	--	--	--	--	--	--	--	--	.06	.35
AUG.										
18...	11	1.0	71	0	58	8.4	6.4	.1	.06	.37
SEP.										
17...	--	--	--	--	--	--	--	--	.08	.30

11447650 SACRAMENTO RIVER AT FREEPORT, CALIF.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM
OCT.									
09...	.51	.08	--	--	--	--	--	--	--
NOV.									
19...	.27	.10	78	78	.11	4890	41	0	26
DEC.									
11...	.35	.07	--	--	--	--	--	--	--
JAN.									
15...	--	.09	--	--	--	--	--	--	--
FEB.									
12...	1.0	.12	75	77	.10	10900	50	5	20
MAR.									
12...	.43	.32	--	--	--	--	--	--	--
APR.									
16...	.31	.10	--	--	--	--	--	--	--
MAY									
13...	.31	.10	74	75	.10	6470	44	0	25
JUNE									
11...	.26	.06	--	--	--	--	--	--	--
JULY									
16...	.41	.15	--	--	--	--	--	--	--
AUG.									
18...	.43	.13	101	97	.14	5150	54	0	30
SEP.									
17...	.38	.12	--	--	--	--	--	--	--

DATE	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	TOTAL PHYTO-PLANK-TON (CELLS PER ML)	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.									
09...	--	101	7.4	16.0	--	1900	E120	B9	--
NOV.									
19...	.5	115	7.8	12.5	10	1200	E180	B64	2.8
DEC.									
11...	--	126	7.7	10.0	--	500	B48	140	--
JAN.									
15...	--	130	7.4	8.0	--	970	B20	B10	--
FEB.									
12...	.4	113	7.4	10.0	3	3300	--	--	7.9
MAR.									
12...	--	104	6.8	11.0	--	550	1250	450	--
APR.									
16...	--	134	6.5	12.5	--	920	40	50	--
MAY									
13...	.5	108	6.9	16.0	19	3000	79	B18	2.5
JUNE									
11...	--	102	6.9	19.0	--	2300	--	--	--
JULY									
16...	--	118	6.9	20.5	--	2800	140	B12	--
AUG.									
18...	.7	150	6.8	20.0	16	2700	B100	100	3.8
SEP.									
17...	--	169	6.6	20.0	--	--	B70	100	--

11447650 SACRAMENTO RIVER AT FREEPORT, CALIF.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

DATE	PHYLUM .CLASS ..ORDER ...FAMILY ....GENUS .....SPECIES	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
OCT 9	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...HYDRODICTYACEAE			
	....PEDIASTRUM			14
	...SCENEDESMACEAE			
	....SCENEDESMUS			7
	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA			16
	....MELOSIRA			2
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES			6
	....COCCONEIS			1
	...CYMBELLACEAE			
	....CYMBELLA			1
	...FRAGILARIACEAE			
	....FRAGILARIA			2
	....SYNEDRA			10
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA			5
	...NITZSCHIACEAE			
	....NITZSCHIA			4
	CRYPTOPHYTA			
	.CRYPTOPHYCEAE			
	..CRYPTOMONADALES			
	...CRYPTOMONADACEAE			
	....CRYPTOMONAS			4
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..CHROOCOCCALES			
	...CHROOCOCCACEAE			
	....AGMENELLUM			7
	....ANACYSTIS			9
	..OSCILLATORIALES	FILAMENTOUS		
	...NOSTOCACEAE			
	....ANABAENA			13
	TOTAL PHYTOPLANKTON		1900	
NOV 19	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...OOCYSTACEAE			
	....ANKISTRODESMUS			2
	....KIRCHNERIELLA			1
	...SCENEDESMACEAE			
	....SCENEDESMUS			4
	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA			11
	....MELOSIRA			4
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES			5
	....COCCONEIS			4
	....RHOIOCOSPHENIA			6
	...DIATOMACEAE			
	....DIATOMA			1
	...GOMPHONEMATACEAE			
	....GOMPHONEMA			1
	...NAVICULACEAE	NAVICULOID		
	....FRUSTULIA			1
	....NAVICULA			25
	...NITZSCHIACEAE			
	....NITZSCHIA			23
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..OSCILLATORIALES	FILAMENTOUS		
	...HORMOGONALES			
	....LYNGBYA			10
	EUGLENOPHYTA			
	.CHRYSOPHYCEAE			
	..EUGLENALES			
	...EUGLENACEAE			
	....TRACHELOMONAS			2
	TOTAL PHYTOPLANKTON		1200	

11447650 SACRAMENTO RIVER AT FREEPORT, CALIF.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

DATE	PHYLUM .CLASS ..ORDER ...FAMILY ....GENUS .....SPECIES	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
DEC 11	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA			6
	....MELOSIRA			65
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES			2
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA			10
	...NITZSCHIACEAE			
	....NITZSCHIA			18
	TOTAL PHYTOPLANKTON		500	
JAN 15	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...SCENEDESMACEAE			
	....SCENEDESMUS			8
	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA			19
	....MELOSIRA			25
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES			13
	....COCCONEIS			2
	....RHOIOCOSPHENIA			2
	...CYMBELLACEAE			
	....CYMBELLA			2
	...DIATOMACEAE			
	....OPEPHORA			2
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA			6
	...NITZSCHIACEAE			
	....NITZSCHIA			8
	...TABELLARIACEAE			
	....TABELLARIA			2
	TOTAL PHYTOPLANKTON		970	
FEB 12	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....MELOSIRA			45
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....COCCONEIS			2
	...CYMBELLACEAE			
	....AMPHORA			5
	....CYMBELLA			2
	....EPITHEMIA			2
	...FRAGILARIACEAE			
	....FRAGILARIA			21
	...GOMPHONEMATACEAE			
	....GOMPHONEMA			7
	...NITZSCHIACEAE			
	....NITZSCHIA			11
	...SURIRELLACEAE			
	....SURIRELLA			4
	EUGLENOPHYTA			
	.CHRYSOPHYCEAE			
	..EUGLENALES			
	...EUGLENACEAE			
	....TRACHELOMONAS			2
	TOTAL PHYTOPLANKTON		3300	

11447650 SACRAMENTO RIVER AT FREEPORT, CALIF.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

DATE	PHYLUM .CLASS ..ORDER ...FAMILY ....GENUS .....SPECIES	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
MAR 12	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA			31
	....MELOSIRA			15
	..PENNALES	PENNATE		
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA			15
	...NITZSCHIACEAE			
	....NITZSCHIA			38
	TOTAL PHYTOPLANKTON		550	
APR 16	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...MICRACTINIACEAE			
	....GOLENKINIA			1
	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA			22
	....MELOSIRA			30
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES			3
	...CYMBELLACEAE			
	....CYMBELLA			3
	...DIATOMACEAE			
	....DIATOMA			1
	...EUNOTIACEAE			
	....EUNOTIA			1
	...FRAGILARIACEAE			
	....ASTERIONELLA			15
	....FRAGILARIA			4
	....SYNEDRA			3
	...GOMPHONEMATACEAE			
	....GOMPHONEMA			1
	...MERIDIONACEAE			
	....MERIDION			1
	...NITZSCHIACEAE			
	....NITZSCHIA			5
	...SURIRELLACEAE			
	....SURIRELLA			3
	...TABELLARIACEAE			
	....TABELLARIA			6
	TOTAL PHYTOPLANKTON		920	
MAY 13	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA			4
	....MELOSIRA			24
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....RHOIOCOSPHENIA			2
	...DIATOMACEAE			
	....DIATOMA			1
	...FRAGILARIACEAE			
	....FRAGILARIA			51
	....SYNEDRA			4
	...GOMPHONEMATACEAE			
	....GOMPHONEMA			1
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA			4
	...NITZSCHIACEAE			
	....NITZSCHIA			4
	...SURIRELLACEAE			
	....CYMATOPLEURA			1
	....SURIRELLA			1
	...TABELLARIACEAE			
	....TABELLARIA			4
	TOTAL PHYTOPLANKTON		3000	

11447650 SACRAMENTO RIVER AT FREEPORT, CALIF.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

DATE	PHYLUM .CLASS ..ORDER ...FAMILY ....GENUS .....SPECIES	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
JUNE 11	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...SCENEDESMACEAE			
	....SCENEDESMUS			2
	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....MELOSIRA			24
	..PENNALES	PENNATE		
	...CYMBELLACEAE			
	....CYMBELLA			2
	....EPITHEMIA			2
	...FRAGILARIACEAE			
	....FRAGILARIA			2
	...GOMPHONEMATACEAE			
	....GOMPHONEMA			2
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA			11
	...NITZSCHIACEAE			
	....NITZSCHIA			2
	...TABELLARIACEAE			
	....TABELLARIA			4
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..OSCILLATORIALES	FILAMENTOUS		
	...NOSTOCACEAE			
	....ANABAENA			48
	TOTAL PHYTOPLANKTON		2300	
JULY 16	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...OOCYSTACEAE			
	....ANKISTRODESMUS		43	2
	...SCENEDESMACEAE			
	....SCENEDESMUS		170	6
	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA		340	12
	....MELOSIRA		870	30
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES		130	5
	....RHOICOSPHENIA		43	2
	...CYMBELLACEAE			
	....CYMBELLA		43	2
	....EPITHEMIA			<1
	...FRAGILARIACEAE			
	....FRAGILARIA		780	27
	....SYNEDRA		43	2
	...GOMPHONEMATACEAE			
	....GOMPHONEMA		43	2
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		170	6
	....PINNULARIA			<1
	...NITZSCHIACEAE			
	....NITZSCHIA		170	6
	...SURIRELLACEAE			
	....CYMATOPLEURA			<1
	...TABELLARIACEAE			
	....TABELLARIA			<1
	TOTAL PHYTOPLANKTON		2880	

11447650 SACRAMENTO RIVER AT FREEPORT, CALIF.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

DATE	PHYLUM .CLASS ..ORDER ...FAMILY ....GENUS .....SPECIES	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
AUG 18	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...OOCYSTACEAE			
	....ANKISTRODESMUS		62	2
	...SCENEDESMACEAE			
	....CRUCIGENIA		490	18
	....SCENEDESMUS			<1
	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA		120	5
	....MELOSIRA		370	14
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....RHOICOSPHENIA		31	1
	...CYMBELLACEAE			
	....CYMBELLA		62	2
	....EPITHEMIA		31	1
	...DIATOMACEAE			
	....DIATOMA			<1
	...FRAGILARIACEAE			
	....FRAGILARIA		1000	39
	...GOMPHONEMATACEAE			
	....GOMPHONEMA		62	2
	...NAVICULACEAE	NAVICULOID		
	....CALONEIS		0	0
	....GYROSIGMA		0	0
	....NAVICULA		120	5
	...NITZSCHIACEAE			
	....NITZSCHIA		180	7
	...SURIRELLACEAE			
	....CYMATOPLEURA		31	1
	....SURIRELLA		62	2
	TOTAL PHYTOPLANKTON		2700	
SEP 19	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...SCENEDESMACEAE			
	....SCENEDESMUS			<1
	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...BIDDULPHIACEAE			
	....BIDDULPHIA		14	1
	...COSCINODISCACEAE			
	....CYCLOTELLA		100	5
	....MELOSIRA		170	9
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....RHOICOSPHENIA		29	1
	...CYMBELLACEAE			
	....CYMBELLA		14	1
	....EPITHEMIA		14	1
	...DIATOMACEAE			
	....DIATOMA			<1
	...EUNOTIACEAE			
	....EUNOTIA			<1
	...FRAGILARIACEAE			
	....ASTERIONELLA			<1
	....FRAGILARIA		840	41
	....HANNAEA			<1
	....SYNEDRA		72	4
	...GOMPHONEMATACEAE			
	....GOMPHONEMA		43	2
	...NAVICULACEAE	NAVICULOID		
	....AMPHIPRORA		14	1
	....DIPLONEIS			<1
	....NAVICULA		110	6
	...NITZSCHIACEAE			
	....HANTZSCHIA		14	1
	....NITZSCHIA		110	6
	...SURIRELLACEAE			
	....SURIRELLA		29	1
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..OSCILLATORIALES	FILAMENTOUS		
	...HORMOGONALES			
	....OSCILLATORIA		450	22
	TOTAL PHYTOPLANKTON		2080	

11447650 SACRAMENTO RIVER AT FREEPORT, CALIF.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL B MG/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL A MG/SQ M
DEC. 11-31	3.80	5.40	1.20	16.0
JAN. 01-15	3.80	5.40	1.20	16.0
MAY 13-31	3.80	5.10	1.00	22.0
JUNE 01-11	3.80	5.10	1.00	22.0
AUG. 18-31	56.0	69.0	4.10	86.0
SEP. 01-17	56.0	69.0	4.10	86.0

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALDRIN (UG/L)	SUS-PENDED ALDRIN (UG/L)	TOTAL ALDRIN (UG/L)	DIS-SOLVED CHLOR-DANE (UG/L)	SUS-PENDED CHLOR-DANE (UG/L)	TOTAL CHLOR-DANE (UG/L)	DIS-SOLVED DDD (UG/L)	SUS-PENDED DDD (UG/L)	TOTAL DDD (UG/L)	DIS-SOLVED DDE (UG/L)
OCT. 30...	1030	.00	.00	.00	.0	.0	.0	.00	.00	.00	.00
FEB. 13...	1000	.00	.00	.00	.0	.0	.0	.00	.00	.00	.00

DATE	SUS-PENDED DDE (UG/L)	TOTAL DDE (UG/L)	DIS-SOLVED DDT (UG/L)	SUS-PENDED DDT (UG/L)	TOTAL DDT (UG/L)	DIS-SOLVED DI-AZINON (UG/L)	SUS-PENDED DI-AZINON (UG/L)	TOTAL DI-AZINON (UG/L)	DIS-SOLVED DI-ELDRIN (UG/L)	SUS-PENDED DI-ELDRIN (UG/L)	TOTAL DI-ELDRIN (UG/L)
OCT. 30...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
FEB. 13...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	DIS-SOLVED ENDRIN (UG/L)	SUS-PENDED ENDRIN (UG/L)	TOTAL ENDRIN (UG/L)	DIS-SOLVED HEPTA-CHLOR (UG/L)	SUS-PENDED HEPTA-CHLOR (UG/L)	TOTAL HEPTA-CHLOR (UG/L)	DIS-SOLVED HEPTA-CHLOR EPOXIDE (UG/L)	SUS-PENDED HEPTA-CHLOR EPOXIDE (UG/L)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	DIS-SOLVED LINDANE (UG/L)	SUS-PENDED LINDANE (UG/L)
OCT. 30...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
FEB. 13...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TOTAL LINDANE (UG/L)	DIS-SOLVED MALA-THION (UG/L)	SUS-PENDED MALA-THION (UG/L)	TOTAL MALA-THION (UG/L)	DIS-SOLVED METHYL PARA-THION (UG/L)	SUS-PENDED METHYL PARA-THION (UG/L)	TOTAL METHYL PARA-THION (UG/L)	DIS-SOLVED PARA-THION (UG/L)	SUS-PENDED PARA-THION (UG/L)	TOTAL PARA-THION (UG/L)	DIS-SOLVED PCB (UG/L)
OCT. 30...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.0
FEB. 13...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.0

DATE	SUS-PENDED PCB (UG/L)	TOTAL PCB (UG/L)	DIS-SOLVED 2,4-D (UG/L)	SUS-PENDED 2,4-D (UG/L)	DIS-SOLVED 2,4,5-T (UG/L)	SUS-PENDED 2,4,5-T (UG/L)	TOTAL 2,4,5-T (UG/L)	DIS-SOLVED SILVEX (UG/L)	SUS-PENDED SILVEX (UG/L)	TOTAL SILVEX (UG/L)
OCT. 30...	.0	.0	.00	.00	.00	.00	.00	.01	.00	.01
FEB. 13...	.0	.0	.02	.00	.00	.00	.00	.00	.00	.00

11447650 SACRAMENTO RIVER AT FREEPORT, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	SUS-PENDED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)
NOV.									
19...	3	0	3	<10	<9	1	0	0	0
FEB.									
12...	1	0	2	<10	<9	1	20	20	0
MAY									
13...	2	1	1	<10	<10	0	10	10	0
AUG.									
18...	3	2	1	<10	<10	0	10	10	0

DATE	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)
NOV.									
19...	<50	<50	0	<10	<7	3	<100	<97	3
FEB.									
12...	<50	<48	2	160	140	20	<100	<95	5
MAY									
13...	<50	<50	0	20	16	4	<100	<96	4
AUG.									
18...	<50	<50	0	10	6	4	<100	<95	5

DATE	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV.									
19...	--	--	.4	0	0	0	20	10	10
FEB.									
12...	.3	.3	.0	0	0	0	80	70	10
MAY									
13...	.0	.0	.0	0	0	0	30	30	0
AUG.									
18...	.1	.0	.1	0	0	0	30	20	10

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)	SUS-PENDED GROSS BETA AS CS-137 (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED URANIUM (U) (UG/L)
NOV.									
06...	1030	<1.0	.6	1.6	.5	1.3	.4	.02	.02
SEP.									
17...	1100	<1.1	.5	4.2	.9	3.4	.8	.02	.15

11447650 SACRAMENTO RIVER AT FREEPORT, CALIF.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), FEBRUARY TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---	104	79	102	104	103	---	---
2					---	92	73	102	162	111	---	181
3					---	---	66	107	124	102	---	173
4					---	---	64	108	133	91	---	182
5					---	91	65	105	166	88	---	137
6					---	88	69	103	172	84	---	161
7					---	90	71	107	168	88	---	---
8					---	92	77	103	144	89	---	---
9					---	88	79	110	125	92	---	---
10					---	83	81	96	144	117	---	118
11					---	84	91	97	171	122	---	138
12					---	82	94	95	121	113	93	140
13					---	83	100	102	99	115	102	132
14					135	85	99	99	128	117	107	136
15					126	87	96	98	---	117	117	142
16					111	92	96	107	---	117	---	143
17					110	97	96	117	---	114	---	135
18					110	96	95	121	---	110	---	132
19					111	95	99	120	---	110	---	133
20					105	96	96	105	---	110	---	133
21					103	91	96	117	---	111	176	134
22					103	91	106	121	---	111	161	132
23					107	93	106	125	---	---	---	133
24					104	93	115	136	---	---	---	127
25					102	93	120	144	---	---	---	127
26					100	94	122	139	---	---	---	124
27					101	105	120	137	125	---	---	123
28					98	112	116	137	106	---	---	117
29					---	115	118	133	112	---	---	120
30					---	95	117	141	102	---	---	117
31					---	83	---	132	---	---	---	---
MONTH					---	93	94	115	---	---	---	137

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), OCTOBER 1974 TO JULY 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	143	188	143	163	162	148	126	102	130	130		
2	188	188	141	168	158	148	116	104	125	133		
3	174	188	143	173	161	160	109	104	124	132		
4	156	188	143	159	109	156	107	103	121	131		
5	188	185	141	148	115	137	114	105	125	128		
6	182	192	141	129	126	122	119	106	125	132		
7	---	193	134	144	136	113	124	107	118	135		
8	---	196	128	156	147	103	126	---	112	138		
9	98	203	129	135	147	108	127	---	108	138		
10	110	199	124	126	---	116	125	---	106	139		
11	139	196	134	133	---	129	119	---	102	137		
12	162	195	133	131	---	131	128	115	99	136		
13	176	196	149	---	126	132	138	108	99	135		
14	179	194	156	---	159	148	138	108	102	133		
15	181	187	168	---	108	141	124	109	102	129		
16	183	182	177	141	116	142	130	112	106	127		
17	178	171	186	159	126	144	134	112	103	129		
18	166	159	189	173	139	148	127	112	104	136		
19	157	150	194	187	108	138	---	117	109	141		
20	143	136	198	---	113	142	---	120	111	139		
21	129	122	195	181	134	---	130	122	112	137		
22	115	107	189	195	137	124	128	127	119	137		
23	106	---	187	202	133	119	126	130	139	134		
24	102	117	183	191	137	121	120	132	142	134		
25	106	122	182	178	139	119	123	136	144	135		
26	108	129	179	178	143	114	119	145	142	133		
27	151	134	178	172	142	115	112	150	135	135		
28	176	137	177	179	137	116	109	147	131	136		
29	180	141	171	157	---	110	106	145	134	136		
30	187	143	166	146	---	116	102	139	141	134		
31	186	---	165	148	---	122	---	136	---	---		
MONTH	148	167	162	161	133	129	121	120	119	134		

11447650 SACRAMENTO RIVER AT FREEPORT, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	17.5	14.5	13.5	10.5	10.5	6.0	5.5	7.0	7.0	11.5	11.5
2	18.0	17.5	14.0	13.5	10.5	10.5	6.0	5.5	7.5	7.0	11.5	11.5
3	18.0	17.5	13.5	13.0	10.5	10.5	6.0	6.0	8.0	7.5	12.0	11.5
4	17.5	17.0	13.5	13.0	11.0	10.5	6.5	6.0	8.0	7.5	12.0	11.5
5	17.5	17.0	13.0	12.5	11.0	10.5	6.5	6.5	8.5	8.0	12.0	11.5
6	17.0	16.5	13.0	13.0	11.0	11.0	7.0	7.0	8.5	8.0	12.0	11.5
7	17.0	16.0	13.5	13.0	11.0	11.0	7.5	7.0	8.5	8.5	12.0	11.5
8	16.5	16.5	13.5	13.0	10.5	10.5	8.5	7.5	9.0	8.5	12.0	11.5
9	17.0	16.5	13.5	13.0	10.5	10.0	8.5	8.5	10.0	9.0	12.0	11.5
10	16.5	16.0	13.5	13.0	10.0	10.0	8.5	8.0	10.0	10.0	11.5	11.5
11	16.5	16.0	13.5	13.0	10.0	9.5	8.0	8.0	10.0	10.0	11.5	11.5
12	16.5	16.0	13.5	13.0	10.0	9.5	8.0	7.5	10.0	10.0	11.5	11.5
13	16.5	16.0	13.5	13.0	10.0	9.5	8.0	7.5	10.0	10.0	11.5	11.0
14	16.5	16.0	13.5	13.0	10.0	9.5	8.0	7.5	10.0	10.0	11.0	10.5
15	16.5	16.0	13.5	13.0	10.0	9.5	8.0	8.0	10.0	9.5	11.0	10.0
16	17.0	16.5	13.5	13.0	10.0	9.5	8.5	8.0	9.5	9.0	10.5	10.0
17	17.5	16.5	13.0	12.5	10.0	10.0	8.5	8.5	9.0	8.5	10.5	10.0
18	16.5	16.0	13.0	12.5	10.0	9.5	8.5	8.5	8.5	8.5	10.5	10.0
19	16.5	16.0	13.0	12.5	9.5	9.5	8.5	8.5	8.5	8.5	10.5	10.0
20	---	---	13.0	12.5	9.5	9.0	8.5	8.5	9.0	8.5	10.5	10.0
21	---	---	12.5	12.5	9.0	9.0	8.5	8.5	9.0	8.5	10.5	10.0
22	---	---	12.5	12.5	9.0	8.5	9.0	8.5	8.5	8.0	10.0	10.0
23	---	---	12.5	12.0	8.5	7.5	9.0	9.0	8.5	8.0	10.0	10.0
24	---	---	12.0	11.5	7.5	7.0	9.0	9.0	9.0	8.0	10.0	10.0
25	---	---	12.0	11.5	7.0	7.0	9.5	9.0	9.5	9.0	10.0	10.0
26	---	---	11.5	11.5	7.0	6.5	9.5	9.0	10.5	9.5	10.5	9.5
27	15.0	14.5	11.5	11.0	7.0	7.0	9.5	8.5	11.0	10.0	10.0	9.5
28	15.0	14.5	11.0	11.0	7.0	7.0	8.5	8.0	11.5	11.0	10.0	9.5
29	15.0	14.5	11.0	11.0	7.0	6.5	8.0	8.0	---	---	9.5	9.5
30	15.0	14.5	11.0	10.5	7.0	6.5	8.0	7.5	---	---	10.5	9.5
31	15.0	14.0	---	---	6.5	6.0	7.5	7.0	---	---	11.0	10.5
MONTH	---	---	14.5	10.5	11.0	6.0	9.5	5.5	11.5	7.0	12.0	9.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	11.0	14.5	14.0	19.5	19.0	20.0	19.5	22.0	21.0	20.0	19.5
2	11.5	11.0	15.0	14.0	19.5	19.0	19.5	19.0	22.0	21.0	20.0	19.5
3	11.5	11.5	15.0	14.0	19.0	18.5	19.5	19.0	22.0	21.5	20.0	19.5
4	11.5	11.0	14.0	13.5	19.0	19.0	19.5	19.0	22.0	21.5	20.0	19.5
5	11.0	10.5	14.0	13.5	19.5	19.0	19.5	19.0	22.0	21.0	20.5	20.0
6	10.5	10.5	14.0	13.0	19.5	19.0	20.0	19.5	21.5	21.0	20.5	20.0
7	10.5	10.5	14.0	13.5	19.5	19.0	20.5	20.0	21.0	20.5	20.5	19.5
8	10.5	10.5	14.5	14.0	19.5	18.5	21.0	20.5	21.0	20.5	20.5	19.5
9	11.0	10.5	15.0	14.5	19.5	19.0	21.5	20.5	21.5	20.5	20.5	20.0
10	11.5	11.0	15.0	14.5	19.5	19.0	21.5	21.0	21.5	21.0	20.5	20.0
11	12.0	11.5	15.5	15.0	19.5	18.5	21.5	21.0	21.5	21.0	20.5	20.0
12	13.0	12.0	15.5	15.0	19.0	18.5	22.0	21.0	21.5	20.5	20.0	19.5
13	13.5	12.5	16.0	15.0	19.5	19.0	22.0	21.0	21.5	20.0	20.0	19.5
14	13.5	13.0	16.0	15.5	20.0	19.5	22.0	21.0	21.0	20.5	20.0	19.5
15	13.5	12.5	16.0	15.5	20.0	19.0	21.5	21.0	21.0	20.5	20.0	19.5
16	12.5	12.5	16.0	15.5	19.5	19.0	21.0	20.5	21.0	20.0	20.0	19.5
17	12.5	12.5	16.0	15.5	19.5	19.0	21.0	20.5	20.5	19.5	20.5	20.0
18	12.5	12.0	17.0	16.0	19.5	19.0	21.0	20.0	20.5	20.0	20.0	20.0
19	13.0	12.0	17.5	16.5	19.0	18.0	21.0	20.5	20.0	19.5	20.0	19.5
20	13.5	13.0	17.0	16.0	18.5	17.5	21.5	20.5	20.0	19.5	20.0	19.0
21	14.0	13.0	16.0	15.5	18.5	17.5	21.5	20.5	20.5	20.0	20.0	19.5
22	14.5	13.5	16.0	15.5	19.0	18.0	22.0	21.0	20.5	20.0	20.0	19.5
23	14.0	13.5	16.5	16.0	19.5	18.5	22.5	21.0	21.0	20.5	20.5	20.0
24	14.0	13.0	17.0	16.5	19.0	18.5	22.5	21.5	21.5	20.5	20.5	20.0
25	13.5	12.5	17.5	17.5	19.0	18.0	23.0	21.5	21.5	20.5	20.5	20.0
26	13.0	12.5	18.0	17.5	19.5	18.5	23.5	22.5	21.5	21.0	20.0	19.5
27	13.0	12.5	18.5	18.0	20.0	19.0	23.0	22.5	21.0	20.0	20.0	19.5
28	13.5	13.0	18.5	18.0	20.0	19.0	22.5	22.0	20.5	20.0	19.5	18.5
29	13.5	13.0	18.5	18.5	20.5	19.5	22.5	21.5	20.5	20.0	19.0	18.5
30	14.0	13.0	19.0	18.5	20.0	19.5	22.0	21.0	20.0	19.5	19.0	18.0
31	---	---	19.5	19.0	---	---	22.0	21.0	20.0	19.5	---	---
MONTH	14.5	10.5	19.5	13.0	20.5	17.5	23.5	19.0	22.0	19.5	20.5	18.0

11447650 SACRAMENTO RIVER AT FREEPORT, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT. 09...	1045	16.0	21700	32	1880	87
NOV. 19...	1045	12.5	23200	29	1820	78
DEC. 11...	1200	10.0	28900	40	3120	--
JAN. 15...	1400	8.0	19600	20	1060	82
FEB. 12...	1030	10.0	53600	381	55100	86
MAR. 12...	1030	11.0	54200	371	54300	78
APR. 16...	1000	12.5	28700	70	5420	85
MAY 13...	1030	16.0	32400	66	5770	83
JUNE 11...	1100	19.0	30400	53	4350	80
JULY 16...	1030	20.5	19400	44	2310	83
AUG. 18...	1100	20.0	18900	44	2250	90
SEP. 17...	1100	20.0	21200	60	3430	86

11447810 SACRAMENTO RIVER AT GREEN'S LANDING, NEAR COURTLAND, CALIF.

LOCATION.--Lat 38°20'45", long 121°32'42", in SW¼NE¼ sec.28, T.6 N., R.4 E., Sacramento County, on left bank 2.2 mi (3.5 km) upstream from Sutter Slough, and 1.6 mi (2.6 km) northeast of Courtland.

PERIOD OF RECORD.--Chemical analyses: October 1952 to September 1958, June 1971 to current year. Published as "at Snodgrass Slough, near Courtland" in 1953-58.
Specific conductance: November 1973 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 242 micromhos Nov. 19; minimum daily, 103 micromhos Jan. 7.
Period of record:
Specific conductance: Maximum daily, 242 micromhos Nov. 19, 1974; minimum daily, 71 micromhos Apr. 2, 3, 1974.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. Specific conductance data furnished by Bureau of Reclamation.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT.												
03...	0650	16	--	--	--	--	--	--	--	58	0	48
16...	1200	--	--	50	--	10	--	--	--	--	--	--
17...	0655	17	--	--	--	--	--	--	--	60	0	49
NOV.												
07...	1200	18	--	--	--	--	--	--	--	60	0	49
19...	0955	19	--	--	--	--	--	--	--	42	0	34
20...	1300	--	--	90	--	10	--	--	--	--	--	--
DEC.												
18...	0915	20	--	--	--	--	--	--	--	70	0	57
18...	1300	--	--	50	--	0	10	6.3	8.6	66	0	54
JAN.												
15...	1345	--	--	100	--	20	12	6.1	9.0	67	0	55
22...	1225	--	690	40	20	10	--	--	--	79	0	65
FEB.												
04...	1145	--	--	--	--	--	--	--	--	53	0	43
19...	1220	--	--	620	--	60	11	6.2	7.2	64	0	52
MAR.												
18...	1445	--	--	--	--	--	--	--	--	67	0	55
19...	1100	--	--	430	--	50	12	6.6	7.3	70	0	57
APR.												
01...	1625	21	--	--	--	--	--	--	--	60	0	49
16...	1200	--	--	430	--	30	11	6.4	8.2	64	0	52
18...	1755	19	--	--	--	--	--	--	--	62	0	51
MAY												
01...	0900	15	1500	60	30	0	--	--	--	54	0	44
15...	1550	--	--	--	--	--	--	--	--	55	0	45
21...	1200	--	--	420	--	30	10	5.4	8.8	58	0	48
JUNE												
03...	1205	14	--	--	--	--	--	--	--	56	0	46
17...	1110	16	--	--	--	--	--	--	--	52	0	43
18...	1245	--	--	10	--	0	8.6	4.5	6.9	51	0	42
JULY												
01...	1055	17	--	--	--	--	--	--	--	68	0	56
15...	1015	15	--	--	--	--	--	--	--	89	0	73
16...	1230	--	--	70	--	20	9.7	5.4	7.2	60	0	49
AUG.												
12...	1110	16	--	--	--	--	--	--	--	--	--	--
20...	1200	--	--	150	--	30	12	6.8	11	76	0	62
26...	0650	18	--	--	--	--	--	--	--	--	--	--
SEP.												
11...	0805	18	920	40	20	10	--	--	--	68	0	56
17...	1330	--	--	100	--	30	11	8.4	12	80	0	66
25...	0815	17	--	--	--	--	--	--	--	55	0	45

11447810 SACRAMENTO RIVER AT GREEN'S LANDING, NEAR COURTLAND, CALIF.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.												
03...	--	4.7	--	.09	--	.11	.37	.29	.48	.09	.07	78
16...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	5.2	--	.13	--	.13	.19	.17	.32	.10	.07	71
NOV.												
07...	--	6.1	--	.14	--	.15	.49	.45	.64	.10	.09	88
19...	--	4.2	--	.11	--	.13	.53	.47	.66	.10	.07	76
20...	--	--	--	--	--	--	--	--	--	--	--	--
DEC.												
18...	--	4.7	--	.16	--	.13	.21	.17	.34	.12	.07	90
18...	7.9	3.4	.1	.16	--	.10	.10	--	--	.09	.07	110
JAN.												
15...	9.2	6.3	.1	.20	--	.10	.20	--	--	.08	.06	100
22...	--	12	--	.20	--	.12	.46	.38	.58	.12	.08	120
FEB.												
04...	--	6.1	--	.29	--	.13	1.4	1.8	1.5	.25	.07	62
19...	10	5.9	.0	.21	--	.03	.40	--	--	.14	.03	94
MAR.												
18...	--	5.7	--	.14	.00	.02	.20	.20	--	.09	.06	85
19...	7.7	5.4	.0	.16	--	.02	.30	--	--	.10	.04	87
APR.												
01...	--	4.7	--	.16	.00	.02	.30	.30	--	.11	.02	94
16...	9.9	5.0	.1	.13	--	.04	.20	--	--	.09	.05	91
18...	--	4.4	--	.14	.00	.03	.20	.20	--	.08	.06	81
MAY												
01...	--	3.1	--	.10	.00	.05	.20	.20	--	.08	.05	84
15...	--	2.9	--	.08	.00	.06	.20	.20	--	.07	.04	84
21...	9.7	5.8	.1	.08	--	.03	.20	--	--	.08	.04	71
JUNE												
03...	--	6.1	--	.08	.00	.05	.20	.20	--	.08	.05	77
17...	--	4.2	--	.08	.00	.05	.20	.20	--	.07	.06	71
18...	2.8	4.7	.1	.08	--	.05	.20	--	--	.07	.06	69
JULY												
01...	--	6.6	--	.13	.00	.11	.30	.20	--	.10	.07	96
15...	--	5.2	--	.08	.00	.05	.20	.10	--	.10	.06	86
16...	7.9	5.0	.1	.08	--	.10	.20	--	--	.10	.07	101
AUG.												
12...	--	6.7	--	.07	.00	.13	.20	.20	--	.11	.06	92
20...	9.0	7.2	.1	.09	--	.07	.20	--	--	.19	.07	90
26...	--	8.5	--	.08	.00	.10	.30	.20	--	.08	.03	104
SEP.												
11...	--	9.4	--	.10	.00	.08	.20	.20	--	.09	.05	110
17...	10	8.2	.1	.12	--	.06	.20	--	--	.09	.05	103
25...	--	8.5	--	.09	.00	.09	.30	.30	--	.10	.05	102

11447810 SACRAMENTO RIVER AT GREEN'S LANDING, NEAR COURTLAND, CALIF.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	PHENOLS (UG/L)
OCT.												
03...	.11	29	--	--	--	105	7.2	17.0	7	8.5	1.9	--
16...	--	--	--	--	--	108	7.3	16.5	--	9.4	--	--
17...	.10	16	--	--	--	102	7.2	16.0	8	9.1	--	--
NOV.												
07...	.12	16	--	--	--	119	6.9	13.0	8	9.5	1.4	--
19...	.10	14	--	--	--	108	6.9	13.0	9	9.7	--	--
20...	--	--	--	--	--	103	7.3	13.0	--	9.8	--	--
DEC.												
18...	.12	19	--	--	--	122	7.4	9.0	8	10.4	1.1	--
18...	.15	--	51	0	.5	125	7.3	10.0	--	10.5	--	--
JAN.												
15...	.14	--	55	0	.5	132	7.2	8.5	--	11.0	--	--
22...	.16	28	--	--	--	202	7.5	6.0	8	10.8	2.4	--
FEB.												
04...	.08	149	--	--	--	107	7.4	8.0	78	10.8	2.6	--
19...	.13	--	53	0	.4	126	7.2	8.5	67	10.8	--	1
MAR.												
18...	.12	87	--	--	--	161	7.6	13.0	52	10.6	1.1	--
19...	.12	--	57	0	.4	133	7.4	10.5	10	10.6	--	--
APR.												
01...	.13	164	--	--	--	133	7.5	12.0	80	10.5	.9	--
16...	.12	--	54	1	.5	133	7.3	13.0	13	10.0	--	--
18...	.11	45	--	--	--	139	7.3	12.0	33	10.5	--	--
MAY												
01...	.11	29	--	--	--	117	7.5	14.0	18	10.1	1.2	--
15...	.11	53	--	--	--	125	7.6	16.0	14	9.7	--	--
21...	.10	--	47	0	.6	122	7.4	18.0	20	9.1	--	--
JUNE												
03...	.10	35	--	--	--	142	7.5	19.0	9	8.7	1.1	--
17...	.10	22	--	--	--	110	7.6	19.0	9	8.8	--	--
18...	.09	--	40	0	.5	106	7.4	19.5	6	9.1	--	--
JULY												
01...	.13	35	--	--	--	152	7.8	19.0	10	8.4	--	--
15...	.12	29	--	--	--	138	7.8	21.0	9	8.1	.9	--
16...	.14	--	46	0	.5	117	7.5	21.5	5	9.6	--	--
AUG.												
12...	.13	20	--	--	--	146	6.8	21.0	8	8.8	1.1	--
20...	.12	--	58	0	.6	144	7.3	20.0	9	8.0	--	--
26...	.14	18	--	--	--	164	7.3	20.0	9	8.4	--	--
SEP.												
11...	.15	20	--	--	--	187	7.5	20.0	12	7.8	1.2	--
17...	.14	--	62	0	.7	163	7.4	20.5	8	7.6	--	1
25...	.14	17	--	--	--	124	7.5	20.0	10	7.7	--	--

11447810 SACRAMENTO RIVER AT GREEN'S LANDING, NEAR COURTLAND, CALIF.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)
OCT.									
16...	1200	--	0	--	--	--	--	--	--
NOV.									
20...	1300	--	0	--	--	--	--	--	--
DEC.									
18...	1300	--	0	100	--	--	--	--	--
JAN.									
15...	1345	--	0	100	--	--	--	--	--
22...	1225	0	0	--	0	0	10	0	--
FEB.									
19...	1220	--	0	0	--	--	--	0	--
MAR.									
19...	1100	--	0	100	--	--	--	--	--
APR.									
16...	1200	--	0	0	--	--	--	--	--
MAY									
01...	0900	0	0	--	0	0	10	0	--
21...	1200	--	0	0	--	--	--	--	--
JUNE									
18...	1245	--	0	0	--	--	--	--	--
JULY									
16...	1230	--	0	100	--	--	--	--	--
AUG.									
20...	1200	--	0	100	--	--	--	--	--
SEP.									
11...	0805	0	0	--	0	0	10	0	--
17...	1330	--	0	0	--	--	--	--	0

DATE	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.								
16...	--	10	--	0	--	0	--	0
NOV.								
20...	--	0	--	0	--	0	--	0
DEC.								
18...	--	0	--	0	--	0	--	0
JAN.								
15...	--	0	--	0	--	0	--	0
22...	0	0	0	0	.3	--	10	0
FEB.								
19...	--	10	--	0	--	10	--	10
MAR.								
19...	--	10	--	0	--	0	--	10
APR.								
16...	--	10	--	0	--	0	--	10
MAY								
01...	10	0	10	0	.0	--	10	10
21...	--	10	--	0	--	10	--	10
JUNE								
18...	--	10	--	0	--	0	--	10
JULY								
16...	--	0	--	0	--	10	--	0
AUG.								
20...	--	10	--	0	--	0	--	0
SEP.								
11...	10	10	0	0	.0	--	10	10
17...	--	0	--	0	--	0	--	0

11447810 SACRAMENTO RIVER AT GREEN'S LANDING, NEAR COURTLAND, CALIF.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	133	111	166	140	160	136	116	141	156	143	179
2	121	130	114	156	157	160	148	116	135	150	144	181
3	122	133	116	161	182	171	147	116	137	146	---	181
4	117	131	112	152	115	173	149	115	135	144	148	181
5	112	133	180	148	122	168	153	121	137	141	154	181
6	112	135	117	148	180	165	148	119	137	148	149	184
7	115	128	111	103	141	171	149	118	130	147	145	183
8	119	126	118	148	156	173	143	120	124	153	147	186
9	113	131	129	146	151	166	---	118	122	152	149	189
10	112	136	129	137	129	148	---	120	116	152	---	190
11	110	131	129	181	115	148	---	120	113	151	145	188
12	109	131	135	125	124	141	---	126	111	148	153	188
13	180	189	142	147	124	144	---	125	113	150	152	---
14	114	188	144	164	107	150	---	124	112	145	151	---
15	118	---	---	148	112	152	149	124	114	143	153	188
16	116	---	141	151	180	151	141	126	116	137	156	188
17	111	---	139	160	117	156	139	125	115	139	160	179
18	110	---	147	159	189	150	136	126	116	146	158	175
19	113	242	128	157	143	152	144	130	123	153	157	179
20	112	169	140	159	145	150	147	133	124	148	174	175
21	114	119	137	163	149	135	149	134	125	148	178	173
22	122	116	137	202	152	130	144	140	127	152	177	171
23	115	117	140	197	144	126	141	146	157	148	177	168
24	117	112	143	197	151	125	135	147	156	147	177	163
25	114	111	137	183	154	123	137	151	158	148	175	160
26	116	111	134	172	156	116	132	160	160	146	174	156
27	117	112	136	168	157	120	127	163	154	146	175	150
28	119	113	132	172	156	125	121	162	148	145	175	146
29	129	109	141	153	---	120	121	159	150	149	174	143
30	132	111	154	147	---	128	118	152	155	143	178	141
31	135	---	188	159	---	133	---	149	---	141	176	---
MONTH	117	135	135	159	145	146	140	132	132	147	161	174

11448500 ADOBE CREEK NEAR KELSEYVILLE, CALIF.

LOCATION.--Lat 38°55'37", long 122°52'47", in SE¼SE¼ sec.32, T.13 N., R.9 W., Lake County, on left bank 2.3 mi (3.7 km) upstream from Highland Creek, and 4.2 mi (6.8 km) southwest of Kelseyville.

DRAINAGE AREA.--6.36 mi² (16.47 km²).

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,476.06 ft (449.903 m) above mean sea level.

AVERAGE DISCHARGE.--21 years, 12.8 ft³/s (0.362 m³/s), 9,270 acre-ft/yr (11.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 894 ft³/s (25.3 m³/s) Mar. 21 (gage height, 7.59 ft or 2.313 m); no flow for several months.

Period of record: Maximum discharge, 1,570 ft³/s (44.5 m³/s) Jan. 16, 1974 (gage height, 8.92 ft or 2.719 m); maximum gage height, 9.22 ft (2.810 m) Jan. 31, 1963; no flow at times in each year.

REMARKS.--Records good. Some regulation and diversions above station for irrigation of about 200 acres (809,000 m²).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.20	.20	1.2	300	8.9	10	5.4	.25	0		
2	0	.15	4.1	1.0	124	21	8.7	4.1	.25	0		
3	0	.11	20	.85	55	12	8.6	4.1	.25	0		
4	0	.15	7.4	.85	68	10	9.3	3.4	.15	0		
5	0	.15	1.9	.85	34	12	9.0	3.0	.02	0		
6	0	.15	1.0	5.4	50	13	7.8	3.0	0	0		
7	0	.42	.69	3.7	53	221	7.2	2.7	0	0		
8	0	.33	.55	11	186	120	7.4	2.7	.11	0		
9	0	.20	.42	6.9	225	56	6.9	2.4	.11	.02		
10	0	.20	.42	4.5	120	37	5.9	2.4	.09	0		
11	0	.15	.42	3.0	44	24	5.9	2.4	.09	0		
12	0	.15	.42	2.2	306	18	4.9	1.9	.09	0		
13	0	.11	.42	1.7	268	16	4.5	1.7	.09	0		
14	0	.15	.42	1.5	64	13	4.5	2.2	.06	0		
15	0	.11	.42	1.2	31	53	4.1	1.7	.06	0		
16	0	.15	.33	1.0	20	54	4.1	1.5	.04	0		
17	0	.15	.33	1.0	14	108	3.4	1.2	.04	0		
18	0	.20	.33	.85	11	182	3.0	1.2	.04	0		
19	0	.15	.33	.69	18	126	3.0	1.2	.02	0		
20	0	.15	.33	.69	15	60	2.7	1.0	.02	0		
21	0	1.9	.33	.69	11	310	2.7	1.0	.02	0		
22	0	.69	.33	.69	9.5	153	3.0	1.0	0	0		
23	0	.33	.25	.55	8.4	71	3.4	.85	.02	0		
24	0	.33	.25	.55	7.9	66	15	.85	0	0		
25	0	.69	.25	.55	6.9	94	10	.69	0	0		
26	0	.33	.25	.55	5.8	47	6.9	.69	.02	0		
27	0	.25	55	.42	5.4	31	5.4	.69	0	0		
28	0	.20	19	.42	4.9	21	4.9	.33	0	0		
29	0	.20	4.9	.42	---	17	4.5	.33	0	0		
30	0	.20	2.4	.42	---	14	4.9	.33	.06	0		
31	.08	---	1.7	55	---	12	---	.33	---	0		---
TOTAL	.08	8.65	125.09	110.34	2065.8	2000.9	181.6	56.29	1.90	.02	0	0
MEAN	.003	.29	4.04	3.56	73.8	64.5	6.05	1.82	.063	.0006	0	0
MAX	.08	1.9	55	55	306	310	15	5.4	.25	.02	0	0
MIN	0	.11	.20	.42	4.9	8.9	2.7	.33	0	0	0	0
AC-FT	.2	17	248	219	4100	3970	360	112	3.8	.04	0	0

CAL YR 1974 TOTAL 5494.23 MEAN 15.1 MAX 811 MIN 0 AC-FT 10900
WTR YR 1975 TOTAL 4550.67 MEAN 12.5 MAX 310 MIN 0 AC-FT 9030

Peak discharge (base, 400 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-1	1230	7.54	872	3-7	1330	7.12	702
2-8	1900	6.28	412	3-21	1330	7.59	894
2-12	2315	7.31	777				

11448900 HIGHLAND CREEK ABOVE HIGHLAND CREEK DAM, CALIF.

LOCATION.--Lat 38°55'48", long 122°55'11", in NW¼SE¼ sec.36, T.13 N., R.10 W., Lake County, on left bank 100 ft (30 m) downstream from Pipeline Creek, 1.7 mi (2.7 km) upstream from Highland Creek Dam, and 5.7 mi (9.2 km) southwest of Kelseyville.

DRAINAGE AREA.--11.9 mi² (30.8 km²).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,490.07 ft (454.173 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 22.9 ft³/s (0.649 m³/s), 16,590 acre-ft/yr (20.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,810 ft³/s (51.3 m³/s) Mar. 21 (gage height, 8.68 ft or 2.646 m); minimum daily, 0.01 ft³/s (<0.001 m³/s) Sept. 9.
Period of record: Maximum discharge, 3,140 ft³/s (88.9 m³/s) Jan. 16, 1974 (gage height, 10.91 ft or 3.325 m); maximum gage height, 12.15 ft (3.703 m) Dec. 22, 1964; no flow at times in most years.

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1968(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.37	1.3	3.0	612	12	21	5.5	1.8	.68	.12	.10
2	.05	.37	2.5	2.3	226	23	18	5.2	1.8	.68	.10	.10
3	.06	.37	15	2.0	102	14	18	5.7	1.8	.68	.09	.10
4	.07	.33	35	2.0	127	12	18	5.2	1.5	.74	.08	.09
5	.08	.33	9.0	2.1	70	15	16	4.9	1.5	.74	.08	.08
6	.08	.30	2.5	34	93	19	14	4.6	1.4	.62	.08	.07
7	.09	.73	1.7	15	106	472	12	4.6	1.4	.52	.09	.04
8	.11	.73	1.4	39	351	275	14	4.4	1.3	.44	.09	.02
9	.18	.59	1.3	25	403	104	12	4.2	1.1	.37	.09	.01
10	.15	.66	1.2	17	200	65	11	4.2	1.0	.37	.08	.07
11	.13	.59	1.3	10	74	45	9.6	3.9	1.0	.32	.07	.09
12	.11	.59	1.4	7.0	461	31	8.8	3.7	1.0	.29	.07	.08
13	.10	.52	1.4	5.4	372	28	8.4	3.5	.87	.29	.08	.08
14	.10	.52	1.4	4.2	106	24	8.4	3.5	.81	.27	.08	.08
15	.08	.59	1.4	3.7	56	93	7.7	3.5	.81	.44	.08	.09
16	.09	.59	1.3	3.0	36	108	7.7	3.5	.81	.57	.08	.09
17	.08	.66	1.3	2.8	25	120	7.3	3.3	.81	.44	.08	.09
18	.08	.89	1.2	2.7	16	226	6.6	3.1	.87	.34	.13	.08
19	.07	1.0	1.2	2.3	33	194	6.3	2.9	.95	.32	.15	.09
20	.07	.94	1.1	2.1	27	102	6.0	2.9	.87	.29	.12	.09
21	.08	1.2	1.2	2.0	20	593	5.7	2.9	.74	.25	.12	.09
22	.09	1.4	1.2	1.8	16	368	5.7	2.7	.74	.21	.12	.08
23	.12	1.2	1.1	1.8	13	156	5.7	2.7	.74	.17	.09	.09
24	.14	1.0	1.1	1.7	12	120	19	2.5	.95	.14	.09	.08
25	.14	1.7	1.1	1.7	11	173	12	2.5	.95	.12	.09	.08
26	.15	1.4	1.1	1.7	9.2	90	8.4	2.4	.87	.10	.09	.07
27	.52	1.3	145	1.5	8.0	63	7.3	2.4	.81	.10	.11	.07
28	.89	1.2	57	1.5	7.7	46	6.6	2.2	.68	.10	.12	.07
29	.37	1.4	13	1.5	---	35	6.3	2.0	.62	.12	.11	.09
30	.30	1.6	6.3	1.5	---	29	6.0	1.9	.62	.16	.11	.09
31	.41	---	4.0	77	---	25	---	1.8	---	.16	.11	---
TOTAL	5.04	25.07	316.0	278.3	3592.9	3680	313.5	108.3	31.12	11.04	3.00	2.35
MEAN	.16	.84	10.2	8.98	128	119	10.5	3.49	1.04	.36	.097	.078
MAX	.89	1.7	145	77	612	593	21	5.7	1.8	.74	.15	.10
MIN	.05	.30	1.1	1.5	7.7	12	5.7	1.8	.62	.10	.07	.01
AC-FT	10.0	50	627	552	7130	7300	622	215	62	22	6.0	4.7

CAL YR 1974 TOTAL 11693.51 MEAN 32.0 MAX 1660 MIN .03 AC-FT 23190
WTR YR 1975 TOTAL 8366.62 MEAN 22.9 MAX 612 MIN .01 AC-FT 16600

Peak discharge (base, 1,200 ft³/s).--Feb. 1 (1245) 1,500 ft³/s (8.10 ft); Mar. 21 (1500) 1,810 ft³/s (8.68 ft).

11449010 HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.

LOCATION.--Lat 38°56'54", long 122°54'03", in NE¼ sec.30, T.13 N., R.9 W., Lake County, on left bank 500 ft (152 m) downstream from Highland Creek Dam, and 4.0 mi (6.4 km) southwest of Kelseyville.

DRAINAGE AREA.--14.2 mi² (36.8 km²).

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,416.52 ft (431.755 m) above mean sea level.

AVERAGE DISCHARGE (unadjusted).--9 years (1966-75), 27.2 ft³/s (0.770 m³/s), 19,710 acre-ft/yr (24.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 545 ft³/s (15.4 m³/s) Feb. 1 (gage height, 4.92 ft or 1.500 m); no flow many days.

Period of record: Maximum discharge, 765 ft³/s (21.7 m³/s) Dec. 3, 1970 (gage height, 4.78 ft or 1.457 m); maximum gage height, 5.09 ft (1.551 m) Jan. 16, 1974; no flow many days in each year.

REMARKS.--Records good except those below 1.0 ft³/s (0.028 m³/s), which are poor. Flow completely regulated by Highland Creek Dam 500 ft (152 m) upstream, capacity, 3,500 acre-ft (4.32 hm³). No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.21	.76	2.2	370	9.6	24	14				0
2	0	.31	.67	1.8	458	29	22	14				0
3	0	.26	11	1.6	121	20	23	16				0
4	0	.26	30	1.6	139	15	23	17				0
5	0	.31	7.7	1.6	75	17	22	17				.02
6	0	.37	2.5	13	102	23	19	7.8				.31
7	0	.37	1.8	18	117	366	18	0				.59
8	27	.37	1.4	24	279	352	18	0				.76
9	.51	.37	1.1	26	442	133	19	0				.86
10	.16	.37	1.1	16	325	71	17	0				.96
11	.16	.44	1.1	11	85	53	16	0				.96
12	.16	.37	1.2	6.6	276	39	16	0				1.1
13	.16	.37	1.2	4.6	514	32	15	0				.96
14	.14	.37	1.2	3.4	187	29	15	0				.86
15	.07	.44	1.4	3.0	65	57	15	0				2.2
16	.09	.44	1.2	2.7	44	155	15	0				2.7
17	.11	.44	1.1	2.5	31	119	16	0				2.2
18	.11	.44	1.1	2.2	23	246	15	0				1.0
19	.09	.44	.96	2.0	32	215	14	0				0
20	.11	.44	.96	2.0	35	112	13	0				0
21	.11	.59	1.1	2.0	23	292	13	0				0
22	.21	.67	1.1	2.0	19	523	13	0				0
23	.26	.76	1.1	1.8	16	349	13	0				0
24	.31	.86	1.1	1.8	14	126	24	0				0
25	.26	.96	1.1	1.8	13	192	26	0				0
26	.26	.96	1.1	1.8	11	113	20	0				0
27	.31	.86	89	1.8	9.6	62	16	0				0
28	.37	.76	75	1.6	9.0	53	15	0				0
29	.44	.76	18	1.6	---	40	14	0				0
30	.44	.76	6.6	1.6	---	33	14	0				0
31	.51	---	3.0	53	---	29	---	0	---			---
TOTAL	32.35	15.33	267.65	216.6	3834.6	3904.6	523	85.8	0	0	0	15.48
MEAN	1.04	.51	8.63	6.99	137	126	17.4	2.77	0	0	0	.52
MAX	27	.96	89	53	514	523	26	17	0	0	0	2.7
MIN	0	.21	.67	1.6	9.0	9.6	13	0	0	0	0	0
AC-FT	64	30	531	430	7610	7740	1040	170	0	0	0	31

CAL YR 1974 TOTAL 11449.35 MEAN 31.4 MAX 606 MIN 0 AC-FT 22710
WTR YR 1975 TOTAL 8895.41 MEAN 24.4 MAX 523 MIN 0 AC-FT 17640

11449010 HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water years 1968 to current year (partial-record station). Published as sta 11448900 "above Highland Creek Dam" in 1968.
Water temperatures: November 1966 to current year.
Sediment records: December 1965 to current year.

EXTREMES.--Current year:
Sediment concentrations: Maximum daily, 171 mg/l Mar. 22; minimum daily, no flow for many days.
Sediment discharge: Maximum daily, 241 tons (219 tonnes) Mar. 22; minimum daily, 0 tons (0 tonnes) on many days.
Period of record:
Sediment concentrations: Maximum daily, 300 mg/l Jan. 18, 1973; minimum daily, no flow for many days in 1966-75.
Sediment discharge: Maximum daily, 390 tons (354 tonnes) Jan. 18, 1973; minimum daily, 0 tons (0 tonnes) on many days in 1966-75.

REMARKS.--Bed at sampling point is concrete outlet from dam with no material over concrete.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
NOV. 13...	1115	.36	45	30	12	1.3	309	253	6.2
DEC. 10...	1638	1.1	43	29	13	1.4	297	244	7.9
JAN. 21...	1450	2.0	37	23	11	1.1	228	187	9.1
FEB. 06...	1600	101	14	8.6	4.6	1.3	86	71	5.8

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 13...	3.8	240	0	10	.3	479	7.8	14.0	7.8
DEC. 10...	6.3	230	0	11	.4	465	7.9	9.5	6.0
JAN. 21...	6.4	190	0	11	.4	376	7.7	10.0	7.3
FEB. 06...	3.0	70	0	12	.2	151	7.4	5.5	5.5

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975 (ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	---	---	---	11.0	12.0	17.5				
2		---	---	---	---	11.0	12.0	---				
3		---	---	---	6.0	10.0	11.5	---				
4		---	---	---	6.5	12.0	11.0	---				
5		---	---	---	6.5	10.0	---	16.0				
6		---	---	---	6.5	---	---	---				
7		---	---	---	7.0	10.0	11.0	---				
8		---	---	---	8.5	10.0	10.0	---				
9		---	---	---	9.0	10.0	---	---				
10		---	9.5	---	9.0	11.0	13.0	---				
11		---	---	---	9.0	11.0	---	---				
12		---	---	---	8.5	11.0	13.5	---				
13		14.0	---	---	9.5	10.5	14.0	---				
14		---	---	---	9.0	11.0	13.0	---				
15		---	---	---	9.5	---	---	---				
16		---	---	---	9.0	10.0	---	---				
17		---	---	---	8.5	9.0	---	---				
18		---	---	---	9.0	9.5	---	---				
19		---	---	---	8.5	10.5	12.0	---				
20		---	---	---	8.0	11.0	13.0	---				
21		---	---	10.0	7.5	9.0	15.0	---				
22		---	---	---	---	---	---	---				
23		---	---	---	---	---	13.0	---				
24		---	---	---	9.0	---	---	---				
25		---	---	---	10.0	---	---	---				
26		---	---	---	9.5	9.5	---	---				
27		---	---	---	10.0	---	15.0	---				
28		---	---	---	10.0	---	16.0	---				
29		---	---	---	---	---	16.0	---				
30		---	---	---	---	---	16.5	---				
31		---	6.5	---	---	---	---	---				
MONTH		---	---	---	8.5	---	---	---				

11449010 HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	.21	5	0	.76	5	.01
2	0	0	0	.31	5	0	.67	5	.01
3	0	0	0	.26	5	0	11	7	.21
4	0	0	0	.26	5	0	30	20	1.6
5	0	0	0	.31	5	0	7.7	13	.27
6	0	0	0	.37	5	.01	2.5	11	.07
7	0	0	0	.37	5	.01	1.8	10	.05
8	27	10	.73	.37	5	.01	1.4	10	.04
9	.51	15	.02	.37	5	.01	1.1	10	.03
10	.16	10	0	.37	5	.01	1.1	12	.04
11	.16	8	0	.44	5	.01	1.1	13	.04
12	.16	7	0	.37	5	.01	1.2	14	.05
13	.16	7	0	.37	5	.01	1.2	15	.05
14	.14	7	0	.37	5	.01	1.2	16	.05
15	.07	7	0	.44	5	.01	1.4	16	.06
16	.09	7	0	.44	5	.01	1.2	16	.05
17	.11	6	0	.44	5	.01	1.1	16	.05
18	.11	6	0	.44	5	.01	1.1	16	.05
19	.09	6	0	.44	5	.01	.96	16	.04
20	.11	6	0	.44	5	.01	.96	16	.04
21	.11	5	0	.59	5	.01	1.1	16	.05
22	.21	5	0	.67	5	.01	1.1	16	.05
23	.26	6	0	.76	5	.01	1.1	15	.04
24	.31	6	.01	.86	5	.01	1.1	15	.04
25	.26	6	0	.96	5	.01	1.1	14	.04
26	.26	6	0	.96	5	.01	1.1	14	.04
27	.31	6	.01	.86	5	.01	89	24	8.5
28	.37	6	.01	.76	5	.01	75	45	9.4
29	.44	6	.01	.76	5	.01	18	38	1.8
30	.44	6	.01	.76	5	.01	6.6	32	.57
31	.51	6	.01	---	---	---	3.0	23	.19
MONTH	32.35	---	.81	15.33	---	.25	267.65	---	23.53

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.2	28	.12	370	55	55	9.6	13	.34
2	1.8	18	.08	458	103	131	29	13	1.0
3	1.6	13	.06	121	62	20	20	11	.59
4	1.6	13	.06	139	49	18	15	9	.36
5	1.6	13	.06	75	49	9.9	17	9	.41
6	13	14	.49	102	38	10	23	8	.50
7	18	15	.73	117	32	11	366	27	32
8	24	16	1.0	279	24	17	352	77	76
9	26	21	1.5	442	53	60	133	43	16
10	16	18	.43	325	47	43	71	32	6.1
11	11	11	.33	85	33	7.6	53	25	3.6
12	6.6	12	.21	276	29	26	39	20	2.1
13	4.6	11	.16	514	64	89	32	19	1.6
14	3.4	10	.09	187	46	23	29	18	1.4
15	3.0	11	.09	65	40	7.0	57	15	2.3
16	2.7	12	.09	44	15	1.8	155	24	9.8
17	2.5	10	.07	31	14	1.2	119	21	6.6
18	2.2	10	.06	23	13	.81	246	21	14
19	2.0	9	.05	32	23	2.0	215	16	9.3
20	2.0	8	.04	35	21	2.0	112	12	3.6
21	2.0	8	.04	23	20	1.2	292	45	58
22	2.0	8	.04	19	19	.97	523	171	241
23	1.8	8	.04	16	18	.78	349	126	119
24	1.8	7	.03	14	17	.64	126	92	32
25	1.8	7	.03	13	16	.56	192	62	32
26	1.8	7	.03	11	15	.45	113	47	14
27	1.8	6	.03	9.6	15	.39	62	35	5.9
28	1.6	6	.03	9.0	14	.34	53	28	4.0
29	1.6	6	.03	---	---	---	40	24	2.6
30	1.6	6	.03	---	---	---	33	22	2.0
31	53	6	.86	---	---	---	29	20	1.6
MONTH	216.6	---	6.89	3834.6	---	540.64	3904.6	---	699.70

11449010 HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	24	18	1.2	14	4	.15			
2	22	17	1.0	14	4	.15			
3	23	16	.99	16	4	.17			
4	23	14	.87	17	4	.18			
5	22	13	.77	17	3	.14			
6	19	11	.56	7.8	3	.06			
7	18	9	.44	0	0	0			
8	18	8	.39	0	0	0			
9	19	7	.36	0	0	0			
10	17	6	.28	0	0	0			
11	16	6	.26	0	0	0			
12	16	5	.22	0	0	0			
13	15	5	.20	0	0	0			
14	15	6	.24	0	0	0			
15	15	5	.20	0	0	0			
16	15	4	.16	0	0	0			
17	16	5	.22	0	0	0			
18	15	5	.20	0	0	0			
19	14	5	.19	0	0	0			
20	13	5	.18	0	0	0			
21	13	4	.14	0	0	0			
22	13	4	.14	0	0	0			
23	13	5	.18	0	0	0			
24	24	5	.32	0	0	0			
25	26	7	.49	0	0	0			
26	20	7	.38	0	0	0			
27	16	4	.17	0	0	0			
28	15	3	.12	0	0	0			
29	14	2	.08	0	0	0			
30	14	4	.15	0	0	0			
31	---	---	---	0	0	0	---	---	---
MONTH	523	---	11.10	85.80	---	.85	0	---	0

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1							0	0	0
2							0	0	0
3							0	0	0
4							0	0	0
5							.02	2	0
6							.31	7	.01
7							.59	7	.01
8							.76	8	.02
9							.86	8	.02
10							.96	9	.02
11							.96	9	.02
12							1.1	11	.03
13							.96	8	.02
14							.86	7	.02
15							2.2	9	.05
16							2.7	12	.09
17							2.2	10	.06
18							1.0	7	.02
19							0	0	0
20							0	0	0
21							0	0	0
22							0	0	0
23							0	0	0
24							0	0	0
25							0	0	0
26							0	0	0
27							0	0	0
28							0	0	0
29							0	0	0
30							0	0	0
31							---	---	---
MONTH	0	---	0	0	---	0	15.48	---	.39
YEAR	6895.41		1284.16						

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER-ATURE (DEG C)	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
DEC.								
30...	0730	--	9.8	33	.88	--	--	--
JAN.								
08...	1700	--	34	18	1.7	--	--	--
FEB.								
06...	1230	--	78	40	8.4	--	--	--
07...	0430	--	166	54	15	76	87	93
08...	1000	8.0	221	23	14	--	--	--
09...	0905	8.5	426	65	75	--	--	--
09...	1630	9.0	362	57	53	--	--	--
12...	1750	8.5	514	30	42	--	--	--
MAR.								
07...	0950	10.0	456	8	9.8	--	--	--
08...	1725	10.0	302	73	60	--	--	--
17...	1700	9.0	160	19	8.2	--	--	--
18...	1655	9.5	263	17	11	--	--	--

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
DEC.							
30...	--	--	98	100	--	--	--
JAN.							
08...	--	--	91	91	93	95	100
FEB.							
06...	--	--	93	96	98	100	--
07...	97	99	99	99	100	--	--
08...	--	--	99	100	--	--	--
09...	--	--	99	100	--	--	--
09...	--	--	97	98	100	--	--
12...	--	--	91	93	98	100	--
MAR.							
07...	--	--	67	77	93	100	--
08...	--	--	68	75	88	100	--
17...	--	--	97	100	--	--	--
18...	--	--	96	98	100	--	--

11449100 SCOTTS CREEK NEAR LAKEPORT, CALIF.

LOCATION.--Lat 39°05'44", long 122°57'38", in NE¼NW¼ sec.3, T.14 N., R.10 W., Lake County, on left bank at upstream side of Lickhoff Road bridge, 0.9 mi (1.4 km) downstream from small right-bank tributary, and 4.2 mi (6.8 km) northwest of Lakeport.

DRAINAGE AREA.--55.2 mi² (143.0 km²).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,400 ft (427 m), from topographic map. Prior to Oct. 1, 1968, at site 3.0 mi (4.8 km) upstream at different datum.

AVERAGE DISCHARGE.--15 years, 85.3 ft³/s (2.416 m³/s), 61,800 acre-ft/yr (76.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,900 ft³/s (82.1 m³/s) Mar. 21 (gage height, 11.19 ft or 3.411 m); no flow for several months.

Period of record: Maximum discharge, 11,100 ft³/s (314 m³/s) Jan. 16, 1974 (gage height, 13.38 ft or 4.078 m); maximum gage height, 17.88 ft (5.450 m) Dec. 22, 1964, site and datum then in use; no flow for several months in each year.

REMARKS.--Small diversions above station for irrigation.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	12	498	55	138	37	5.5			
2			0	9.8	792	184	117	36	5.2			
3			21	8.5	432	72	108	35	4.5			
4			17	8.3	686	62	109	32	3.4			
5			.10	7.8	314	64	100	28	2.4			
6			0	239	503	98	87	27	1.5			
7			0	103	719	950	85	26	1.1			
8			0	220	982	925	77	24	.60			
9			0	124	1370	516	70	23	.40			
10			0	66	906	376	64	21	.30			
11			0	57	391	266	60	21	.10			
12			0	52	975	196	55	20	0			
13			0	45	1390	171	52	19	0			
14			0	39	559	156	50	18	0			
15			0	34	336	184	45	18	0			
16			0	27	225	412	44	17	0			
17			0	23	160	653	39	16	0			
18			0	19	123	1460	36	15	0			
19			0	16	263	1260	35	14	0			
20			0	14	274	638	34	14	0			
21			0	12	191	1370	32	13	0			
22			0	9.2	151	1600	29	13	0			
23			0	7.7	119	939	32	13	0			
24			0	7.4	96	887	85	12	0			
25			0	7.1	79	1380	82	11	0			
26			0	7.1	69	681	60	9.7	0			
27			76	6.8	61	443	51	8.9	0			
28			112	6.5	56	319	46	8.3	0			
29			40	5.7	---	246	42	7.7	0			
30			23	4.9	---	196	42	6.8	0			
31		---	16	11	---	166	---	6.1	---			---
TOTAL	0	0	303.10	1209.8	12710	16863	1906	568.5	25.00	0	0	0
MEAN	0	0	9.78	39.0	454	543	63.5	18.3	.83	0	0	0
MAX	0	0	112	239	1390	1600	138	37	5.5	0	0	0
MIN	0	0	0	4.9	56	55	29	6.1	0	0	0	0
AC-FT	0	0	601	2400	25210	33410	3780	1130	50	0	0	0

CAL YR 1974 TOTAL 40753.40 MEAN 112 MAX 4500 MIN 0 AC-FT 80830
WTR YR 1975 TOTAL 33565.40 MEAN 92.0 MAX 1600 MIN 0 AC-FT 66580

11449500 KELSEY CREEK NEAR KELSEYVILLE, CALIF.

LOCATION.--Lat 38°55'39", long 122°50'33", in SE¼SE¼ sec.34, T.13 N., R.9 W., Lake County, on left bank 1.6 mi (2.6 km) downstream from Widow Creek, and 3.5 mi (5.6 km) south of Kelseyville.

DRAINAGE AREA.--36.6 mi² (94.8 km²).

PERIOD OF RECORD.--October 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,475.44 ft (449.714 m) above mean sea level. Prior to July 16, 1955, at site 600 ft (183 m) upstream at different datum.

AVERAGE DISCHARGE.--29 years, 76.0 ft³/s (2.152 m³/s), 55,060 acre-ft/yr (67.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,070 ft³/s (115 m³/s) Mar. 21 (gage height, 10.82 ft or 3.298 m); minimum daily, 4.0 ft³/s (0.11 m³/s) Sept. 28.
Period of record: Maximum discharge, 8,800 ft³/s (249 m³/s) Dec. 21, 1955 (gage height, 12.80 ft or 3.901 m); maximum gage height, 13.48 ft (4.109 m) Jan. 5, 1965; minimum discharge, 0.5 ft³/s (0.014 m³/s) Sept. 1, 1950, but may have been less during August 1950.

REMARKS.--Records fair. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1285: 1947-48(M), 1950-52(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	9.4	8.5	24	1200	55	111	47	16	9.3	5.4	4.9
2	5.0	8.5	31	22	520	139	101	42	17	9.2	4.9	4.9
3	5.1	8.2	130	21	260	84	98	42	16	8.8	4.6	4.6
4	5.4	8.1	50	21	310	71	103	41	16	8.8	4.7	4.5
5	7.4	8.1	25	20	200	74	102	39	15	8.7	4.9	4.4
6	5.8	8.2	20	42	230	89	95	37	15	8.0	4.9	4.3
7	5.6	9.8	17	39	315	985	89	36	15	7.6	5.0	4.3
8	5.9	11	15	96	525	661	83	34	14	7.6	4.9	4.5
9	6.2	9.2	14	50	950	311	78	33	13	7.3	4.7	4.5
10	6.2	8.8	13	37	560	228	74	32	13	6.7	4.8	4.8
11	6.1	8.6	12	30	315	173	70	32	12	6.7	4.8	5.0
12	5.8	8.6	12	25	1100	139	64	30	13	6.5	4.9	5.1
13	5.5	8.5	12	24	630	126	60	29	12	6.2	5.0	4.7
14	5.5	8.4	12	22	375	110	59	28	11	6.2	4.9	4.3
15	5.4	8.4	12	21	250	214	57	28	11	8.5	4.9	4.5
16	5.5	8.2	12	20	160	271	57	27	11	9.7	4.9	4.3
17	5.6	8.0	11	19	115	364	54	26	11	8.8	5.1	4.4
18	5.5	7.8	11	18	92	682	50	25	11	8.0	5.0	4.4
19	5.4	7.6	11	18	160	511	47	24	11	7.1	6.2	4.5
20	5.7	7.4	11	17	130	309	45	24	11	6.8	6.4	4.6
21	5.8	30	11	17	103	1310	43	24	11	6.2	6.1	4.2
22	5.9	16	11	16	90	703	42	23	11	6.1	5.6	4.1
23	6.2	11	10	16	79	374	42	23	10	5.9	4.9	4.4
24	6.4	10	10	15	71	326	100	22	10	5.8	4.7	4.4
25	6.5	15	9.9	15	65	925	80	21	9.9	5.7	4.6	4.2
26	6.5	11	10	15	59	307	61	21	10	5.5	4.6	4.2
27	9.4	10	13	14	54	232	55	20	9.7	5.3	4.9	4.1
28	13	9.6	176	14	51	188	51	20	9.7	5.1	5.4	4.0
29	9.9	9.2	51	14	---	160	47	18	9.1	5.3	5.3	4.3
30	9.8	8.8	36	13	---	140	49	18	9.3	5.6	5.0	4.5
31	9.7	---	28	120	---	125	---	17	---	5.6	4.9	---
TOTAL	201.9	301.4	803.4	855	8909	9994	2067	883	363.7	218.6	157.7	133.9
MEAN	6.51	10.0	25.9	27.6	318	322	68.9	28.5	12.1	7.05	5.09	4.46
MAX	13	30	176	120	1200	1310	111	47	17	9.7	6.4	5.1
MIN	5.0	7.4	8.5	13	51	55	42	17	9.1	5.1	4.6	4.0
AC-FT	400	598	1590	1700	17670	19820	4100	1750	721	434	313	266

CAL YR 1974 TOTAL 40169.7 MEAN 110 MAX 3580 MIN 4.1 AC-FT 79680
WTR YR 1975 TOTAL 24888.6 MEAN 68.2 MAX 1310 MIN 4.0 AC-FT 49370

Peak discharge (base, 2,400 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-1	unknown	9.87	2,850	3-7	1515	9.83	2,810
2-12	unknown	--	2,500	3-21	1600	10.82	4,070

11450000 CLEAR LAKE AT LAKEPORT, CALIF.

LOCATION.--Lat 39°02'21", long 122°54'44", in NE¼NE¼ sec.25, T.14 N., R.10 W., Lake County, on private pier at 410 Esplanada Street in Lakeport.

DRAINAGE AREA.--528 mi² (1,368 km²).

PERIOD OF RECORD.--1874-1900 (incomplete), January 1913 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,318.65 ft (401.925 m) above mean sea level. Prior to July 8, 1947, nonrecording gage and July 8, 1947, to Mar. 17, 1949, at municipal wharf at foot of Third Street in Lakeport at datum 0.06 ft (0.018 m) lower. Mar. 18, 1949, to Sept. 30, 1967, at private pier at foot of Fourth Street at datum 0.06 ft (0.018 m) lower.

EXTREMES.--Current year: Maximum daily mean gage height, 8.96 ft (2.731 m) Mar. 26; minimum, 1.70 ft (0.518 m) Nov. 21, 30.

Period of record: Maximum gage height observed, 11.12 ft (3.389 m) Jan. 28, 1914; minimum observed, -3.50 ft (-1.067 m) Sept. 24-27, 1920.

REMARKS.--This natural lake is regulated by gates on a dam at outlet, completed in 1915. Capacity between gage heights 0.00 and 7.56 ft (2.304 m), limits stipulated by court decree of 1920, about 319,000 acre-ft (393 hm³). Water is released down natural channel of Cache Creek from which it is diverted for irrigation (see sta 11451000).

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.10	1.75	1.71	2.01	2.52	6.57	8.37	7.52	6.58	5.18	3.91	2.63
2	2.08	1.76	1.79	2.01	2.82	6.62	8.24	7.49	6.53	5.14	3.86	2.61
3	2.06	1.76	1.87	2.02	2.99	6.63	8.11	7.43	6.50	5.10	3.82	2.58
4	2.05	1.76	1.88	2.02	3.15	6.67	8.02	7.41	6.47	5.08	3.78	2.55
5	2.03	1.76	1.90	2.03	3.29	6.70	7.91	7.41	6.42	5.02	3.72	2.53
6	2.01	1.76	1.89	2.09	3.37	6.74	7.82	7.40	6.38	4.99	3.65	2.50
7	2.00	1.74	1.89	2.12	3.52	6.90	7.69	7.39	6.35	4.95	3.61	2.47
8	1.98	1.75	1.89	2.14	3.79	7.24	7.60	7.37	6.31	4.91	3.57	2.45
9	1.96	1.75	1.89	2.21	4.18	7.45	7.49	7.35	6.27	4.88	3.54	2.42
10	1.94	1.75	1.88	2.26	4.54	7.56	7.49	7.31	6.23	4.84	3.48	2.40
11	1.93	1.75	1.90	2.27	4.59	7.56	7.52	7.29	6.18	4.79	3.44	2.38
12	1.92	1.75	1.90	2.29	4.96	7.52	7.53	7.28	6.14	4.75	3.40	2.35
13	1.90	1.74	1.90	2.30	5.50	7.47	7.53	7.25	6.10	4.71	3.36	2.33
14	1.89	1.74	1.91	2.31	5.77	7.43	7.51	7.22	6.05	4.66	3.32	2.31
15	1.88	1.74	1.91	2.31	5.92	7.42	7.56	7.17	6.00	4.63	3.27	2.28
16	1.87	1.73	1.91	2.32	6.00	7.58	7.56	7.16	5.93	4.60	3.24	2.26
17	1.86	1.73	1.91	2.33	6.06	7.61	7.54	7.14	5.83	4.57	3.23	2.24
18	1.85	1.71	1.91	2.33	6.11	7.80	7.49	7.11	5.79	4.53	3.16	2.22
19	1.84	1.72	1.90	2.34	6.15	8.01	7.46	7.01	5.76	4.49	3.10	2.19
20	1.82	1.73	1.91	2.28	6.27	8.09	7.46	7.00	5.71	4.46	3.08	2.18
21	1.81	1.70	1.87	2.25	6.35	8.15	7.46	6.96	5.67	4.42	3.05	2.16
22	1.80	1.71	1.87	2.26	6.39	8.50	7.44	6.93	5.62	4.39	3.02	2.14
23	1.79	1.71	1.89	2.26	6.42	8.61	7.48	6.91	5.54	4.35	2.97	2.12
24	1.77	1.72	1.88	2.26	6.45	8.70	7.48	6.88	5.48	4.30	2.95	2.11
25	1.76	1.71	1.88	2.26	6.48	8.94	7.50	6.85	5.47	4.26	2.92	2.09
26	1.76	1.71	1.88	2.22	6.50	8.96	7.52	6.80	5.46	4.21	2.88	2.08
27	1.76	1.71	1.95	2.26	6.52	8.90	7.53	6.77	5.44	4.17	2.82	2.05
28	1.75	1.71	2.02	2.25	6.55	8.79	7.54	6.75	5.38	4.11	2.78	2.03
29	1.75	1.71	2.02	2.25	---	8.70	7.53	6.71	5.29	4.04	2.73	2.01
30	1.75	1.70	2.03	2.25	---	8.61	7.53	6.67	5.23	3.99	2.68	2.00
31	1.75	---	2.02	2.34	---	8.50	---	6.63	---	3.95	2.66	---
MEAN	1.88	1.73	1.90	2.22	5.11	7.77	7.63	7.12	5.94	4.60	3.26	2.29
MAX	2.10	1.76	2.03	2.34	6.55	8.96	8.37	7.52	6.58	5.18	3.91	2.63
MIN	1.75	1.70	1.71	2.01	2.52	6.57	7.44	6.63	5.23	3.95	2.66	2.00

WTR YR 1975 MEAN 4.28 MAX 8.96 MIN 1.70

11451000 CACHE CREEK NEAR LOWER LAKE, CALIF.

LOCATION.--Lat 38°55'27", long 122°33'53", in sec.6, T.12 N., R.6 W., Lake County, on left bank 500 ft (152 m) downstream from Clear Lake Dam, 1.9 mi (3.1 km) downstream from Copsey Creek, and 2.5 mi (4.0 km) northeast of Lower Lake.

DRAINAGE AREA.--528 mi² (1,368 km²).

PERIOD OF RECORD.--May 1944 to current year.

GAGE.--Water-stage recorder and rain gage. Datum of gage is 1,280.34 ft (390.248 m) above mean sea level.

AVERAGE DISCHARGE (unadjusted).--31 years, 366 ft³/s (10.37 m³/s), 265,200 acre-ft/yr (327 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,100 ft³/s (144 m³/s) Mar. 21 (gage height, 8.00 ft or 2.438 m); minimum daily, 1.9 ft³/s (0.054 m³/s) Jan. 2, 5-7.

Period of record: Maximum discharge, 8,000 ft³/s (227 m³/s) Feb. 24, 1958 (gage height, 9.40 ft or 2.865 m); minimum recorded, 0.2 ft³/s (0.006 m³/s) Mar. 15-23, 1950.

REMARKS.--Records good. Flow completely regulated by Clear Lake 500 ft (152 m) upstream (see sta 11450000).

REVISIONS (WATER YEARS).--WRD Calif. 1968: 1966-67.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	6.2	4.6	2.0	2.6	3.9	3310	403	615	569	556	253
2	74	6.0	4.8	1.9	2.7	4.0	3220	443	600	569	569	251
3	69	5.8	4.8	2.0	2.7	4.1	3160	463	595	531	548	251
4	68	5.6	4.5	2.0	2.9	4.0	3070	464	582	464	515	251
5	67	5.6	4.5	1.9	3.0	4.1	3010	466	578	425	507	253
6	66	5.6	4.3	1.9	3.1	4.5	2980	475	535	409	487	253
7	65	5.6	4.5	1.9	3.1	4.9	2940	510	531	468	476	253
8	70	5.6	4.5	2.0	3.6	5.1	2840	570	535	527	495	246
9	67	5.8	4.3	2.0	3.7	5.2	1500	565	543	535	495	239
10	60	5.6	4.1	2.0	3.6	1250	8.0	569	565	523	499	241
11	53	5.6	4.3	2.1	3.7	1960	7.7	569	590	499	531	223
12	52	5.4	4.1	2.1	4.1	2010	7.5	565	586	476	539	213
13	52	5.6	4.1	2.1	4.1	1990	7.5	565	573	472	539	204
14	51	5.6	4.0	2.1	4.0	1240	7.5	586	565	503	511	190
15	50	5.6	4.0	2.1	3.9	530	7.4	590	560	507	453	174
16	43	5.4	4.0	2.2	3.9	261	166	604	535	450	402	160
17	36	5.2	3.9	2.4	3.9	1350	887	631	523	406	378	156
18	36	5.0	3.6	2.4	3.7	2320	1280	617	543	396	363	153
19	36	4.6	3.3	2.2	3.7	3010	670	631	535	393	345	139
20	38	4.5	3.1	2.2	3.9	3120	6.9	626	499	439	314	126
21	37	4.6	3.1	2.2	3.8	3570	7.0	595	464	503	311	117
22	36	4.6	3.0	2.2	3.5	3560	7.0	577	446	531	325	107
23	30	4.8	3.0	2.2	3.6	3490	51	599	457	519	325	109
24	24	4.6	2.7	2.2	3.6	3510	81	622	435	535	322	111
25	12	4.8	2.5	2.2	3.6	3680	117	599	402	573	322	111
26	6.8	4.8	2.5	2.2	3.7	3610	139	556	390	577	320	110
27	6.8	4.8	2.6	2.1	3.8	3590	165	552	390	552	320	110
28	6.8	4.8	2.4	2.1	3.8	3540	210	582	390	527	301	110
29	6.4	4.6	2.1	2.2	---	3480	271	617	409	543	290	99
30	6.2	4.8	2.1	2.2	---	3440	345	640	495	543	290	84
31	6.2	---	2.0	2.4	---	3380	---	617	---	539	265	---
TOTAL	1316.2	157.3	111.3	65.7	99.3	57930.8	30478.5	17468	15466	15503	12913	5297
MEAN	42.5	5.24	3.59	2.12	3.55	1869	1016	563	516	500	417	177
MAX	85	6.2	4.8	2.4	4.1	3680	3310	640	615	577	569	253
MIN	6.2	4.5	2.0	1.9	2.6	3.9	6.9	403	390	393	265	84
AC-FT	2610	312	221	130	197	114900	60450	34650	30680	30750	25610	10510
(a)	.69	.93	5.20	6.97	4.18	8.37	1.38	.02	.04	.19	.19	0

CAL YR 1974 TOTAL 295308.8 MEAN 809 MAX 3730 MIN 2.0 AC-FT 585700
WTR YR 1975 TOTAL 156806.1 MEAN 430 MAX 3680 MIN 1.9 AC-FT 311000

a Precipitation, in inches.

11451000 CACHE CREEK NEAR LOWER LAKE, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), October 1953 to September 1966, water year 1967 (partial-record station), October 1973 (revised) to current year.

REMARKS.--Records furnished by California Department of Water Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
OCT.										
04...	0950	67	.02	.60	.05	264	7.6	21.0	6	8.4
NOV.										
15...	1400	5.6	.10	.90	.05	284	7.6	13.5	2	8.1
DEC.										
05...	1050	4.5	.17	.80	.05	296	7.6	10.0	4	9.4
JAN.										
09...	1115	2.1	.24	.90	.04	294	8.1	6.0	5	12.2
FEB.										
21...	1030	3.6	--	--	--	199	7.3	7.5	35	9.9
APR.										
17...	0910	487	.02	.60	.06	273	8.3	12.0	15	10.0
MAY										
15...	1200	599	.00	.60	.08	247	8.0	19.0	10	8.6
JUNE										
12...	0920	586	.03	.90	.07	251	8.0	26.0	10	7.4
JULY										
10...	1105	535	.04	.60	.08	243	8.0	25.0	10	8.1
AUG.										
14...	1015	531	.00	.70	.06	258	8.1	26.0	5	7.4
SEP.										
05...	1015	253	.02	.70	.07	256	7.7	24.0	7	7.4

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
FEB.												
21...	1030	3.6	--	--	11	87	0	71	6.0	--	--	--
APR.												
17...	0910	487	1600	30	6.8	140	0	115	7.5	.02	.60	.06

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
FEB.												
21...	79	8	.5	199	7.3	7.5	35	400	--	--	--	--
APR.												
17...	112	0	.3	273	8.3	12.0	15	800	0	0	10	0

11451100 NORTH FORK CACHE CREEK AT HOUGH SPRINGS, NEAR CLEARLAKE OAKS, CALIF.

LOCATION.--Lat 39°09'56", long 122°37'08", in SE¼NW¼ sec.10, T.15 N., R.7 W., Lake County, on right bank 0.5 mi (0.8 km) upstream from Spanish Creek, 0.9 mi (1.4 km) upstream from Hough Springs, and 10 mi (16 km) northeast of Clearlake Oaks.

DRAINAGE AREA.--60.2 mi² (155.9 km²).

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,840 ft (561 m), from topographic map. Recording rain gage 9 mi (14 km) southwest of gage. Altitude of gage is 3,450 ft (1,052 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 3,050 ft³/s (86.4 m³/s) Feb. 13 (gage height, 6.08 ft or 1.853 m, from floodmarks); minimum daily, 0.59 ft³/s (0.017 m³/s) Sept. 27.
Period of record: Maximum discharge, 7,980 ft³/s (226 m³/s) Jan. 16, 1974 (gage height, 9.23 ft or 2.813 m, from floodmarks), from rating curve extended above 2,400 ft³/s (68.0 m³/s) on basis of slope-area measurement of maximum flow; no flow for several days in 1972.

REMARKS.--Records fair. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.77	2.2	4.0	14	243	143	282	107	22	8.2	2.4	1.9
2	.77	1.9	12	13	380	176	252	97	21	7.8	2.4	1.9
3	.77	1.9	133	12	221	150	233	91	21	7.8	1.9	1.5
4	.77	1.9	184	13	400	125	221	88	19	7.8	1.9	1.5
5	.87	1.9	24	13	188	121	204	81	18	7.8	1.9	1.2
6	.77	1.9	15	98	295	130	193	76	17	7.3	1.5	.96
7	.77	2.7	12	72	622	643	183	71	17	6.9	1.9	.96
8	.87	3.7	10	247	953	744	170	68	17	6.6	1.9	.96
9	2.2	2.7	9.1	104	1160	601	157	63	15	6.2	1.9	1.2
10	1.3	2.7	8.6	62	875	495	147	59	14	5.9	1.9	1.9
11	1.1	2.7	8.6	44	601	396	142	57	14	5.6	1.5	2.4
12	1.1	2.5	8.6	33	1290	303	130	53	13	5.2	1.5	1.9
13	.98	2.5	8.6	27	1460	254	124	51	13	5.2	1.2	1.5
14	.98	2.5	8.6	23	670	211	119	48	12	4.9	1.2	1.2
15	.98	2.7	8.6	21	504	201	113	47	12	5.2	1.5	1.2
16	.98	2.7	8.2	19	372	221	115	46	11	6.2	1.5	1.2
17	.87	2.7	8.2	17	262	472	105	44	10	5.9	1.5	1.2
18	.87	3.4	7.8	16	201	1040	95	40	11	5.2	2.8	.96
19	.87	3.4	7.8	15	368	941	88	38	11	4.9	4.1	.96
20	.87	3.4	7.8	14	458	692	84	37	12	4.9	3.7	.96
21	.87	4.0	7.8	14	317	840	81	36	11	4.4	3.7	.96
22	.77	4.4	7.3	13	232	834	77	35	10	4.1	3.7	.96
23	.87	4.0	7.3	13	185	649	77	34	9.9	3.7	2.8	.75
24	.98	4.0	6.9	13	161	726	246	32	9.9	3.4	2.4	.75
25	1.1	4.8	6.9	13	150	1520	261	31	10	2.8	1.9	.75
26	1.3	4.8	6.9	13	137	797	191	29	9.9	2.4	1.5	.75
27	1.7	4.4	182	12	133	643	159	28	9.4	1.9	1.5	.59
28	5.2	4.0	96	12	135	532	137	26	9.0	1.9	1.9	.75
29	3.0	4.0	32	12	---	433	124	25	8.2	1.9	2.4	.75
30	2.2	4.0	21	15	---	364	115	24	7.8	2.0	2.4	.75
31	2.2	---	16	18	---	327	---	23	---	2.8	1.9	---
TOTAL	39.65	94.4	804.6	1025	12965	15724	4625	1585	395.1	156.8	66.2	35.22
MEAN	1.28	3.15	26.0	33.1	463	507	154	51.1	13.2	5.06	2.14	1.17
MAX	5.2	4.8	182	247	1460	1520	282	107	22	8.2	4.1	2.4
MIN	.77	1.9	4.0	12	133	121	77	23	7.8	1.9	1.2	.59
AC-FT	79	187	1600	2030	25720	31190	9170	3140	784	311	131	70
(a)	1.21	.85	5.46	3.68	8.86	7.65	3.58	.03	.04	.19	.19	0

CAL YR 1974 TOTAL 52002.45 MEAN 142 MAX 4450 MIN .60 AC-FT 103100
WTR YR 1975 TOTAL 37515.97 MEAN 103 MAX 1520 MIN .59 AC-FT 74410

Peak discharge (base, 1,500 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-8	2145	4.91	1,880	3-25	0345	5.87	2,820
2-13	0400	6.08	3,050				

a Precipitation, in inches.

11451500 NORTH FORK CACHE CREEK NEAR LOWER LAKE, CALIF.

LOCATION.--Lat 39°01'09", long 122°34'04", in NE¼ sec.31, T.14 N., R.6 W. (unsurveyed), Lake County, on right bank 500 ft (152 m) upstream from Sweet Hollow Creek, 5 mi (8 km) upstream from mouth, and 7 mi (11 km) northeast of Lower Lake.

DRAINAGE AREA.--197 mi² (510 km²).

PERIOD OF RECORD.--July 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,035.60 ft (315.651 m) above mean sea level. Prior to June 15, 1939, at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE (unadjusted).--44 years (1931-74), 199 ft³/s (5.636 m³/s), 144,200 acre-ft/yr (178 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,490 ft³/s (70.5 m³/s) Feb. 12 (gage height, 5.67 ft or 1.728 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Oct. 1, 2.

Period of record: Maximum discharge, 20,300 ft³/s (575 m³/s) Dec. 11, 1937 (gage height, 13.98 ft or 4.261 m, present datum, from floodmarks), from rating curve extended above 7,600 ft³/s (215 m³/s) on basis of slope-area measurement at gage height 13.9 ft (4.24 m) for peak of Feb. 28, 1940; no flow at times in 1930-36, 1949-50, 1956-57.

REMARKS.--Records fair. Flow regulated by Indian Valley Reservoir 8 mi (13 km) upstream beginning in June 1974, capacity, 296,000 acre-ft (365 hm³). Several small diversions for irrigation of about 150 acres (607,000 m²) above station.

REVISIONS (WATER YEARS).--WSP 831: 1932(M). WSP 1315-A: 1935(M), 1937-38(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	3.0	7.3	6.7	167	60	141	35	38	33	11	10
2	1.0	2.7	20	5.5	184	64	122	32	43	31	11	9.7
3	1.1	2.7	65	4.5	103	52	113	32	105	31	11	9.7
4	1.1	2.4	38	4.5	216	48	108	32	110	31	11	9.7
5	1.2	2.7	17	5.5	125	50	104	31	110	31	12	9.3
6	1.2	2.7	13	40	153	60	100	30	110	30	12	9.3
7	1.3	3.7	11	26	378	451	91	29	108	27	12	9.3
8	1.5	3.7	10	56	632	493	82	28	107	15	12	9.3
9	3.2	4.1	8.7	29	938	323	75	27	108	14	12	9.3
10	2.4	4.1	8.0	23	680	254	68	27	110	14	12	9.3
11	1.8	4.1	7.3	18	353	193	65	26	111	13	12	9.3
12	1.6	3.7	7.3	15	970	147	59	26	111	13	11	9.3
13	1.6	3.7	8.0	14	1190	129	56	25	111	13	11	9.3
14	1.6	3.7	6.7	13	959	114	53	24	111	13	11	9.0
15	1.4	4.1	6.7	12	319	111	51	24	113	13	11	9.0
16	1.4	4.5	6.1	12	205	167	50	24	111	13	11	9.0
17	1.4	4.5	5.5	12	151	284	47	23	111	13	11	9.3
18	1.3	4.5	5.5	11	120	963	44	23	111	13	11	9.3
19	1.3	3.7	5.0	11	280	730	42	23	113	13	11	9.7
20	1.3	4.5	5.0	11	294	506	40	22	111	13	11	9.7
21	1.3	6.1	4.5	10	187	772	39	22	111	13	11	9.7
22	1.1	6.7	6.1	9.1	143	815	37	21	111	13	11	9.7
23	1.1	6.7	7.3	8.7	117	641	37	21	110	13	10	9.7
24	1.1	6.7	4.1	8.7	103	690	54	21	110	12	10	9.3
25	1.1	7.3	4.1	9.4	91	931	65	21	110	12	10	9.3
26	1.1	6.7	4.5	9.4	76	655	50	20	110	12	10	9.3
27	3.0	7.3	18	8.0	68	480	45	20	110	12	10	9.0
28	6.7	7.3	33	6.7	64	340	40	20	108	12	10	9.0
29	4.1	6.7	15	7.3	---	249	36	19	108	12	10	9.0
30	3.3	6.7	11	6.7	---	202	34	20	80	12	10	8.6
31	3.7	---	7.3	18	---	171	---	27	---	12	10	---
TOTAL	57.3	141.0	376.0	431.7	8866	11145	1948	775	3131	522	339	280.4
MEAN	1.85	4.70	12.1	13.9	317	360	64.9	25.0	104	16.8	10.9	9.35
MAX	6.7	7.3	65	56	1190	963	141	35	113	33	12	10
MIN	1.0	2.4	4.1	4.5	64	48	34	19	38	12	10	8.6
AC-FT	114	280	746	856	17590	22110	3860	1540	6210	1040	672	556

CAL YR 1974 TOTAL 107674.84 MEAN 295 MAX 8620 MIN .92 AC-FT 213600
WTR YR 1975 TOTAL 28012.40 MEAN 76.7 MAX 1190 MIN 1.0 AC-FT 55560

11451720 BEAR CREEK NEAR RUMSEY, CALIF.

LOCATION.--Lat 38°56'47", long 122°20'48", in NE¼SW¼ sec.30, T.13 N., R.4 W., Colusa County, on left bank 0.3 mi (0.5 km) downstream from Brophy Canyon, 1.4 mi (2.3 km) upstream from mouth, and 7.3 mi (11.7 km) northwest of Rumsey.

DRAINAGE AREA.--100 mi² (259 km²).

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 750 ft (229 m), from topographic map.

AVERAGE DISCHARGE.--17 years, 49.2 ft³/s (1.393 m³/s), 35,650 acre-ft/yr (44.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,340 ft³/s (151 m³/s) Mar. 21 (gage height, 9.36 ft or 2.853 m); minimum daily, 1.2 ft³/s (0.034 m³/s) Sept. 25-29.
Period of record: Maximum discharge, 9,720 ft³/s (275 m³/s) Jan. 5, 1965 (gage height, 11.93 ft or 3.636 m); no flow July 25, 26, Aug. 20, 1960, July 3 to Sept. 12, 1972.
Maximum stage known since 1955, 12.33 ft (3.758 m) Feb. 24, 1958 (discharge, 9,350 ft³/s or 265 m³/s).

REMARKS.--No regulation or diversion above station.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1963: 1962(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.9	2.8	7.4	275	33	87	26	7.2	3.4	2.3	1.9
2	1.5	2.5	3.7	6.7	486	39	81	25	7.7	4.0	2.3	1.9
3	1.5	2.3	10	6.0	142	34	80	25	7.1	4.2	2.2	1.9
4	1.7	2.2	23	5.7	261	31	85	26	5.9	4.2	2.1	2.0
5	1.6	2.3	21	5.6	91	36	79	26	5.7	4.2	2.0	1.8
6	1.5	2.4	8.5	11	80	82	99	25	5.5	3.9	2.0	1.6
7	1.5	2.5	5.7	18	275	824	77	23	4.9	3.9	1.9	1.4
8	1.6	2.8	4.7	20	535	405	72	22	4.8	3.3	1.8	1.4
9	1.7	2.6	4.3	20	1000	163	67	21	4.2	3.1	1.8	1.5
10	1.8	2.5	4.1	14	601	150	58	21	4.3	3.1	1.8	1.7
11	1.7	2.5	4.1	11	148	114	54	20	3.9	2.9	1.9	1.9
12	1.5	2.5	4.5	8.9	766	83	48	18	3.9	2.9	1.9	1.8
13	1.4	2.5	4.7	7.7	893	80	46	17	3.9	3.0	1.7	1.5
14	1.4	2.5	4.3	7.1	210	107	45	16	3.5	3.0	1.7	1.4
15	1.5	2.5	4.2	6.9	119	120	43	16	3.4	3.7	1.7	1.3
16	1.5	2.5	4.2	6.6	91	387	46	16	3.5	4.6	1.6	1.4
17	1.6	2.6	4.1	6.2	72	265	43	14	3.6	4.5	1.7	1.4
18	1.6	2.7	4.0	6.0	63	921	40	13	3.5	4.3	1.8	1.4
19	1.6	2.8	3.9	5.7	71	326	38	12	3.8	4.8	2.4	1.3
20	1.7	2.6	3.9	5.3	73	192	36	12	4.4	4.3	2.8	1.3
21	1.6	3.1	3.9	5.2	53	1460	35	12	3.9	3.8	2.2	1.3
22	1.5	3.2	3.9	5.0	46	697	33	11	3.6	3.5	2.0	1.3
23	1.6	2.7	3.9	4.8	42	301	32	11	3.6	3.3	1.8	1.3
24	1.7	2.7	3.7	4.8	40	269	37	10	3.4	2.9	1.8	1.3
25	1.8	3.0	3.7	4.8	39	309	45	9.2	3.7	2.8	1.7	1.2
26	1.8	3.1	3.8	4.8	36	202	38	8.9	3.7	2.6	1.7	1.2
27	2.1	2.9	6.7	4.5	35	164	32	8.5	3.3	2.5	2.1	1.2
28	3.6	2.9	30	4.3	33	135	29	7.9	3.0	2.5	2.0	1.2
29	3.2	2.8	24	4.3	---	118	28	7.5	2.8	2.4	2.0	1.2
30	2.4	2.8	13	4.3	---	109	28	8.0	2.6	2.4	1.8	1.3
31	2.7	---	9.1	7.3	---	98	---	7.7	---	2.4	1.9	---
TOTAL	55.4	79.9	235.4	239.9	6576	8254	1561	495.7	128.3	106.4	60.4	44.3
MEAN	1.79	2.66	7.59	7.74	235	266	52.0	16.0	4.28	3.43	1.95	1.48
MAX	3.6	3.2	30	20	1000	1460	99	26	7.7	4.8	2.8	2.0
MIN	1.4	2.2	2.8	4.3	33	31	28	7.5	2.6	2.4	1.6	1.2
AC-FT	110	158	467	476	13040	16370	3100	983	254	211	120	88

CAL YR 1974 TOTAL 22342.5 MEAN 61.2 MAX 1870 MIN 1.4 AC-FT 44320
WTR YR 1975 TOTAL 17836.7 MEAN 48.9 MAX 1460 MIN 1.2 AC-FT 35380

11452000 CACHE CREEK NEAR CAPAY, CALIF.

LOCATION.--Lat 38°43'44", long 122°06'15", in Canada de Capay Grant, Yolo County, on right bank 1.8 mi (2.9 km) upstream from diversion dam, 3.2 mi (5.1 km) northwest of Capay, and 5.4 mi (8.7 km) northwest of Esparto.

DRAINAGE AREA.--1,044 mi^2 (2,704 km^2).

PERIOD OF RECORD.--May 1942 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 225 ft (68.6 m), from river-profile map.

AVERAGE DISCHARGE.--33 years, 686 ft^3/s (19.43 m^3/s), 497,000 acre-ft/yr (613 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 14,200 ft^3/s (402 m^3/s) Mar. 22 (gage height, 13.17 ft or 4.014 m); minimum daily, 9.0 ft^3/s (0.25 m^3/s) Dec. 23.

Period of record: Maximum discharge, 51,600 ft^3/s (1,460 m^3/s) Feb. 24, 1958 (gage height, 20.90 ft or 6.370 m), from rating curve extended above 30,000 ft^3/s (850 m^3/s); no flow Aug. 23 to Sept. 27, 1972.

REMARKS.--Records good. Flow partially regulated by Clear Lake beginning in 1915 (see sta 11450000). About 3,700 acre-ft (4.56 hm^3) diverted annually between stations above Rumsey and near Capay for irrigation of approximately 900 acres (3.64 km^2), from data furnished by U.S. Soil Conservation Service.

REVISIONS (WATER YEARS).--WSP 1305: 1943. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	23	17	45	129	181	3460	480	650	582	536	281
2	98	21	19	39	1600	180	3330	525	668	578	546	269
3	96	20	28	36	585	188	3230	540	681	587	554	261
4	91	19	59	34	700	165	3140	550	684	534	539	262
5	87	18	81	33	451	157	3050	560	681	501	532	254
6	85	18	56	33	317	189	3020	560	645	473	529	249
7	80	18	44	38	580	1520	2950	580	640	469	508	247
8	75	18	37	74	1030	2230	2840	625	636	519	496	247
9	76	18	33	85	3050	1130	2540	645	643	532	512	245
10	76	18	30	84	2620	1030	681	625	643	530	490	242
11	74	18	28	64	1000	2450	335	620	676	516	508	243
12	68	18	27	54	1070	2410	297	610	686	499	511	230
13	64	17	26	48	4780	2390	273	610	680	486	524	218
14	61	17	26	44	1740	2280	260	614	661	490	512	210
15	61	17	26	41	971	1280	251	633	656	524	482	201
16	58	17	25	39	682	1360	245	628	657	515	439	189
17	56	17	26	37	514	1130	390	651	621	470	414	179
18	52	17	26	36	416	4430	1050	666	628	458	400	177
19	48	17	26	35	363	4480	1100	667	642	444	393	174
20	44	18	25	34	572	4240	381	678	626	436	369	164
21	44	18	22	33	455	5350	246	666	605	468	350	141
22	41	19	16	32	367	8290	225	636	570	504	345	134
23	39	19	9.0	31	319	5280	220	630	562	513	343	124
24	39	19	16	31	283	4850	236	654	561	512	340	120
25	38	18	18	30	255	5320	288	653	539	529	338	121
26	34	17	20	30	228	4800	303	625	518	540	333	121
27	32	17	22	29	207	4480	304	588	510	549	326	121
28	30	17	76	29	191	4180	319	595	507	533	321	120
29	26	17	112	27	---	3960	347	613	504	517	309	120
30	26	17	74	28	---	3790	420	651	525	529	304	115
31	25	---	52	33	---	3640	---	674	---	536	297	---
TOTAL	1828	542	1102.0	1266	25475	87440	35731	19052	18505	15873	13400	5779
MEAN	59.0	18.1	35.5	40.8	910	2821	1191	615	617	512	432	193
MAX	104	23	112	85	4780	8290	3460	678	686	587	554	281
MIN	25	17	9.0	27	129	157	220	480	504	436	297	115
AC-FT	3630	1080	2190	2510	50530	173400	70870	37790	36700	31480	26580	11460

CAL YR 1974 TOTAL 485853.0 MEAN 1331 MAX 15400 MIN 9.0 AC-FT 963700
WTR YR 1975 TOTAL 225993.0 MEAN 619 MAX 8290 MIN 9.0 AC-FT 448300

11452000 CACHE CREEK NEAR CAPAY, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water year 1952 (partial-record station), October 1952 to September 1968, water year 1969 (partial-record station), October 1969 to September 1972, water years 1972-74 (partial-record station), October 1974 to current year.
Sediment records: Water years 1959-62 (partial-record station).

REMARKS.--Records furnished by California Department of Water Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
NOV.										
07...	0920	18	44	--	50	--	285	0	234	--
DEC.										
30...	0940	75	46	--	100	--	302	6	258	--
MAR.										
03...	1000	191	36	--	52	--	285	0	234	--
18...	1100	5100	19	--	16	--	144	0	118	--
JUNE										
12...	1000	681	--	--	15	--	156	0	128	--
SEP.										
11...	1430	241	25	18	18	1.8	172	0	141	10

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED BORON (B) (UG/L)
NOV.									
07...	70	--	--	--	--	251	17	--	1800
DEC.									
30...	145	--	604	.82	122	332	74	--	3100
MAR.									
03...	71	--	430	.58	222	250	16	--	1900
18...	12	--	140	.19	1930	117	0	--	600
JUNE									
12...	--	--	171	.23	314	129	1	.6	--
SEP.									
11...	16	.20	187	.25	122	134	0	.7	1100

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
OCT.							
22...	1015	41	539	8.1	15.5	--	10.6
NOV.							
07...	0920	18	677	7.9	14.5	1	9.2
DEC.							
30...	0940	75	997	8.1	6.5	10	11.0
JAN.							
14...	1115	44	961	8.1	9.5	--	12.2
FEB.							
03...	1030	589	481	--	6.0	--	--
MAR.							
03...	1000	191	706	8.2	12.0	7	9.8
18...	1100	5100	252	8.1	10.5	510	10.7
APR.							
01...	1000	3460	285	8.0	11.0	--	10.4
MAY							
14...	0930	614	354	8.0	19.5	--	9.1
JUNE							
12...	1000	681	275	8.1	24.0	35	8.8
JULY							
17...	0900	463	282	8.2	24.0	--	8.2
AUG.							
07...	0815	515	290	8.0	22.0	--	7.9
SEP.							
11...	1430	241	312	8.3	25.5	5	8.4
25...	0830	120	369	8.0	20.5	--	7.8

11452500 CACHE CREEK AT YOLO, CALIF.

LOCATION.--Lat 38°43'31", long 121°48'22", in Rio Jesus Maria Grant, Yolo County, on left bank 800 ft (244 m) upstream from highway bridge, 0.5 mi (0.8 km) south of Yolo, and 7.3 mi (11.7 km) downstream from Moore Dam.

DRAINAGE AREA.--1,139 mi² (2,950 km²).

PERIOD OF RECORD.--January 1903 to current year. Records for water year 1903 incomplete, yearly estimate published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to summer of 1930, nonrecording gage at 58.24 ft (17.752 m) higher. Summer of 1930 to June 11, 1954, water-stage recorder at datum 56.27 ft (17.151 m) higher. June 11, 1954, to July 16, 1965, at datum 52.27 ft (15.932 m) higher. July 17, 1965, to Apr. 24, 1969, at datum 50.27 ft (15.322 m) higher.

AVERAGE DISCHARGE.--73 years, 532 ft³/s (15.07 m³/s), 385,400 acre-ft/yr (475 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 15,000 ft³/s (425 m³/s) Mar. 22 (gage height, 69.71 ft or 21.248 m); no flow many days.

Period of record: Maximum discharge, 41,400 ft³/s (1,170 m³/s) Feb. 25, 1958 (gage height, 85.35 ft or 26.015 m, present datum); maximum stage observed, 88.44 ft (26.957 m), present datum, Mar. 10, 1904; no flow at times in each year.

REMARKS.--Records good Feb. 1 to Mar. 8, fair Mar. 9 to Apr. 30, poor otherwise. Flow regulated by Clear Lake beginning in 1915 (see sta 11450000). Diversions for irrigation of about 30,000 acres (121 km²) between stations near Capay and at Yolo, from data furnished by Clear Lake Water Co.

REVISIONS (WATER YEARS).--WSP 1315-A: 1914(M). WSP 1345: 1906. WSP 1445: 1955. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	.02	0	.40	0	162	3890	40	1.0	3.5	0	0
2	4.8	.01	0	.20	2020	153	3800	40	1.0	1.7	0	0
3	4.0	.01	0	.10	880	167	3700	41	1.5	.90	0	1.5
4	3.3	.01	.50	0	915	153	3270	41	9.5	.60	.20	3.4
5	2.7	.01	1.0	0	671	142	3000	41	20	.20	.40	1.8
6	2.2	0	.50	0	337	154	2900	42	20	0	.60	1.1
7	1.9	0	.20	0	413	273	2800	42	21	0	.78	.60
8	1.6	0	.10	1.0	949	2410	2640	40	21	0	.50	.30
9	1.2	0	0	1.2	3190	1570	2470	38	22	0	.30	0
10	1.0	0	0	1.2	2950	1870	1750	37	22	0	.10	0
11	.86	0	0	.80	1190	2010	488	36	23	0	0	0
12	.72	0	0	.40	763	2390	408	35	23	0	0	0
13	.58	0	0	.20	5470	2490	337	34	24	0	0	0
14	.48	0	0	.10	2130	2590	258	32	24	0	0	0
15	.40	0	0	.10	1070	1930	222	30	25	0	0	0
16	.33	0	0	.05	741	1870	204	28	25	0	0	.10
17	.28	0	0	.02	543	1510	268	26	26	0	0	.30
18	.22	0	0	.01	631	4550	1070	23	26	0	0	.77
19	.19	0	0	0	366	5270	1320	20	28	0	0	.20
20	.16	0	0	0	467	5140	731	18	28	0	0	0
21	.13	0	0	0	503	5150	217	16	30	0	0	0
22	.11	0	0	0	379	10800	160	12	30	0	0	0
23	.09	0	0	0	319	6240	123	9.0	32	0	0	0
24	.07	0	0	0	278	5570	75	5.0	32	0	0	0
25	.06	0	0	0	247	5950	80	1.0	34	0	0	0
26	.05	0	0	0	218	5760	85	1.0	30	0	0	0
27	.04	0	0	0	196	5080	65	.90	25	0	0	0
28	.03	0	1.0	0	177	4650	41	.80	20	0	0	0
29	.03	0	5.0	0	---	4440	40	.80	15	0	0	0
30	.02	0	1.0	0	---	4260	40	.77	9.0	0	0	0
31	.02	---	.50	0	---	4100	---	.78	---	0	0	---
TOTAL	32.57	.06	9.80	5.78	27813	98003	36452	732.05	648.0	6.90	2.88	10.07
MEAN	1.05	.002	.32	.19	993	3161	1215	23.6	21.6	.22	.093	.34
MAX	5.0	.02	5.0	1.2	5470	10800	3890	42	34	3.5	.78	3.4
MIN	.02	0	0	0	0	142	40	.77	1.0	0	0	0
AC-FT	65	.1	19	11	55170	194400	72300	1450	1290	14	5.7	20

CAL YR 1974 TOTAL 398935.63 MEAN 1093 MAX 16600 MIN 0 AC-FT 791300
WTR YR 1975 TOTAL 163716.11 MEAN 449 MAX 10800 MIN 0 AC-FT 324700

NOTE.--No gage-height record Oct. 1 to Feb. 1, May 1 to Sept. 30.

11453000 YOLO BYPASS NEAR WOODLAND, CALIF.

LOCATION.--Lat 38°40'40", long 121°38'35" (unsurveyed), Yolo County, on left bank 300 ft (91 m) upstream from Sacramento and Woodland railroad bridge, 6 mi (10 km) upstream from Sacramento Bypass, 6 mi (10 km) downstream from Fremont weir, and 7 mi (11 km) east of Woodland.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 3.41 ft (1.039 m) below mean sea level. Prior to Dec. 17, 1941, nonrecording gage, and Dec. 18-31, 1941, water-stage recorder, at datum 0.73 ft (0.222 m) higher. A supplementary water-stage recorder 6 mi (10 km) downstream at different datum is used for records of low flow.

AVERAGE DISCHARGE.--36 years, 3,973 ft^3/s (112.5 m^3/s), 2,878,000 acre-ft/yr (3.55 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 30,500 ft^3/s (1,030 m^3/s) Mar. 25 (gage height, 25.70 ft or 7.833 m); minimum daily, 0.08 ft^3/s (0.002 m^3/s) Aug. 13-15.

Period of record: Maximum discharge, 272,000 ft^3/s (7,700 m^3/s) Feb. 8, 1942 (gage height, 32.00 ft or 9.754 m); no flow at times in recent years.

REMARKS.--Records fair. Flow is from Cache Creek and Knights Landing Ridge Cut plus floodwater passing over Fremont weir; during the summer months, the flow consists largely of return water from irrigation. There is some diversion for irrigation between the main and supplementary gage which affects the low-flow record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	5.2	5.2	144	67	416	3460	76	1.0	3.0	1.8	1.0
2	14	5.2	5.5	107	274	307	3080	31	1.0	3.0	1.6	1.0
3	23	5.2	20	67	1230	242	3030	5.8	.90	3.0	1.6	1.0
4	31	5.2	60	27	1680	222	2990	4.7	3.2	2.9	1.6	1.0
5	35	5.2	240	9.7	2010	216	2960	5.8	2.4	2.9	1.4	1.0
6	29	5.1	482	6.2	1640	216	2870	7.5	7.0	2.9	1.4	1.0
7	21	5.1	642	7.2	1180	232	2900	7.0	60	19	1.4	1.0
8	16	5.1	488	5.3	1210	1310	2960	6.6	43	3.2	1.2	1.0
9	13	5.1	258	6.2	2380	2950	2900	5.1	36	2.5	1.2	1.0
10	11	5.1	180	3.2	2900	2590	2550	2.4	24	2.7	1.2	1.0
11	11	5.1	130	3.4	3720	2580	1580	23	3.1	3.5	1.0	12
12	9.5	5.1	96	3.4	3130	3130	1090	82	3.1	2.9	1.0	21
13	8.8	5.1	70	3.4	3990	3160	825	272	3.2	2.4	.08	134
14	8.8	5.1	52	2.7	8670	3040	642	354	3.2	2.5	.08	196
15	8.6	5.1	37	2.0	18000	2770	530	416	3.3	2.6	.08	191
16	9.5	5.1	28	1.7	22100	2260	380	499	3.3	2.7	1.0	191
17	9.1	5.1	21	1.4	14300	2140	336	642	3.4	3.2	1.0	193
18	6.2	5.2	14	1.2	6060	2220	439	728	3.4	2.7	1.0	179
19	5.4	5.2	13	1.2	2880	3980	939	723	3.5	2.4	1.0	176
20	5.0	5.2	12	3.0	1920	3970	1030	819	3.5	2.0	1.1	193
21	5.0	5.2	9.7	1.1	1590	5310	531	993	3.6	2.3	1.1	191
22	5.0	20	11	2.5	1250	9520	211	957	3.6	2.4	1.1	200
23	5.0	15	10	7.2	1020	24100	196	645	3.7	2.6	1.2	191
24	5.0	10	6.2	12	1090	28200	151	267	3.7	3.4	1.4	176
25	5.0	6.6	5.3	12	644	30800	132	36	3.8	3.2	1.2	179
26	5.1	5.0	4.9	10	550	32000	77	1.2	3.8	3.0	1.0	183
27	5.2	5.0	7.2	12	502	28200	56	2.4	3.4	2.7	1.0	174
28	5.4	5.0	38	2.5	468	24400	54	2.9	3.2	2.4	1.0	158
29	7.6	5.0	117	19	---	17500	53	1.7	3.0	2.2	1.0	142
30	9.8	5.0	145	32	---	10300	44	1.0	3.0	2.0	1.0	101
31	5.2	---	169	22	---	5410	---	1.0	---	1.8	1.0	---
TOTAL	357.2	184.6	3377.0	538.5	106455	253609	38996	7618.1	246.30	100.0	33.74	3191.0
MEAN	11.5	6.15	109	17.4	3802	8181	1300	246	8.21	3.23	1.09	106
MAX	35	20	642	144	22100	32000	3460	993	60	19	1.8	200
MIN	5.0	5.0	4.9	1.1	67	216	44	1.0	.90	1.8	.08	1.0
AC-FT	709	366	6700	1070	211200	503000	77350	15110	489	198	67	6330

CAL YR 1974 TOTAL 2953823.17 MEAN 8093 MAX 158000 MIN .35 AC-FT 5859000
WTR YR 1975 TOTAL 414706.44 MEAN 1136 MAX 32000 MIN .08 AC-FT 822600

11453500 PUTAH CREEK NEAR GUENOC, CALIF.

LOCATION.--Lat 38°46'44", long 122°30'59", in Guenoc Grant, Lake County, on right bank just upstream from Coyote Valley damsite, 2.8 mi (4.5 km) upstream from Soda Creek, 3.2 mi (5.1 km) downstream from highway bridge at Guenoc.

DRAINAGE AREA.--113 mi² (293 km²).

PERIOD OF RECORD.--February 1904 to September 1906, July 1930 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 914.18 ft (278.642 m) above mean sea level. February 1904 to September 1906, nonrecording gage 0.2 mi (0.3 km) upstream at different datum.

AVERAGE DISCHARGE.--47 years, 212 ft³/s (6.004 m³/s), 153,600 acre-ft/yr (189 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,800 ft³/s (278 m³/s) Mar. 21 (gage height, 13.55 ft or 4.130 m); no flow for several days.
Period of record: Maximum discharge, 32,000 ft³/s (906 m³/s) Dec. 11, 1937 (gage height, 22.7 ft or 6.92 m), from rating curve extended above 13,000 ft³/s (368 m³/s); no flow many days in 1964, 1970, 1974-75.

REMARKS.--Some regulation by Hartmann Dam on Coyote Creek since 1969, capacity, 3,000 acre-ft (3.70 hm³); diversions and ground-water withdrawals for irrigation of about 1,600 acres (6.48 km²) above station.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1285: 1937(M), 1938, 1940, 1943(M), 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	3.3	22	66	1160	160	347	140	41	7.1	1.6	.10
2	.40	3.3	27	58	1560	335	311	132	41	7.4	2.8	0
3	.40	3.7	174	51	816	243	295	134	38	7.0	3.5	.70
4	.50	4.6	333	46	1310	202	304	123	34	6.0	2.7	2.3
5	.50	4.7	85	42	990	197	295	117	33	7.8	2.5	2.3
6	.60	4.9	57	162	703	224	315	111	31	7.9	1.6	2.3
7	.60	5.3	41	146	1420	1950	275	108	30	6.6	1.9	1.3
8	.70	5.7	33	289	2700	1290	255	104	29	7.2	2.6	1.5
9	.70	6.0	30	144	3090	810	240	101	28	5.8	2.9	1.1
10	.80	8.4	27	106	1420	720	218	99	25	6.0	3.3	1.1
11	.90	9.7	25	88	869	540	204	97	22	5.8	3.2	1.0
12	.90	11	24	75	3020	426	192	94	22	5.4	1.6	1.1
13	1.0	11	22	66	4390	372	184	89	21	4.4	1.5	.90
14	1.0	12	21	61	1190	344	175	86	17	4.6	2.3	2.0
15	1.2	14	21	56	795	377	169	85	15	4.3	1.3	.30
16	1.2	16	20	50	574	802	166	82	14	4.6	2.1	.80
17	1.4	16	19	45	465	1020	159	79	13	4.6	1.2	0
18	1.5	16	18	42	365	3060	150	75	13	4.2	2.0	.20
19	1.9	15	18	39	446	2340	143	72	13	3.5	2.9	1.8
20	2.0	16	17	38	443	1230	137	69	12	3.0	3.1	1.8
21	2.2	23	17	36	325	3480	133	68	14	3.7	2.9	1.8
22	2.4	30	16	35	276	2340	127	67	14	3.4	2.9	1.8
23	2.4	27	16	34	240	1250	125	65	13	3.9	3.0	1.7
24	2.6	23	15	32	220	1100	329	62	12	3.9	2.9	1.5
25	2.6	23	15	32	200	1780	308	58	11	3.2	.10	1.5
26	2.6	22	15	31	186	985	210	56	8.6	2.9	0	1.4
27	2.9	22	396	31	171	767	180	55	6.8	2.7	1.1	0
28	3.4	20	548	30	158	604	164	50	6.7	2.9	1.5	0
29	2.6	21	157	28	---	509	153	47	8.6	2.0	2.1	0
30	2.8	22	99	28	---	445	146	44	8.6	1.8	2.6	0
31	3.3	---	78	53	---	393	---	40	---	1.6	1.4	---
TOTAL	48.30	428.2	2406	2040	29078	29885	6409	2609	594.7	145.8	67.10	32.30
MEAN	1.56	14.3	77.6	65.8	1039	964	214	84.2	19.8	4.70	2.16	1.08
MAX	3.4	30	548	289	4390	3480	347	140	41	7.9	3.5	2.3
MIN	.30	3.3	15	28	158	160	125	40	6.7	1.6	0	0
AC-FT	96	849	4770	4050	57680	59280	12710	5170	1180	289	133	64

CAL YR 1974 TOTAL 103404.60 MEAN 283 MAX 6170 MIN 0 AC-FT 205100
WTR YR 1975 TOTAL 73743.40 MEAN 202 MAX 4390 MIN 0 AC-FT 146300

Peak discharge (base, 5,000 ft³/s).--Feb. 13 (0230) 8,830 ft³/s (12.90 ft); Mar. 21 (1800) 9,800 ft³/s (13.55 ft).

11453550 HUNTING CREEK NEAR KNOXVILLE, CALIF.

LOCATION.--Lat 38°46'18", long 122°24'26", in NE¼SE¼ sec.28, T.11 N., R.5 W., Lake County, on right bank 2,400 ft (732 m) upstream from mouth, 5.3 mi (8.5 km) southwest of Knoxville, and 11.2 mi (18.0 km) east of Middletown.

DRAINAGE AREA.--37.8 mi² (97.9 km²).

PERIOD OF RECORD.--July 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 725 ft (221 m), from topographic map.

AVERAGE DISCHARGE.--6 years, 33.0 ft³/s (0.935 m³/s), 23,910 acre-ft/yr (29.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,960 ft³/s (55.5 m³/s) Mar. 21 (gage height, 6.32 ft or 1.926 m); minimum daily, 0.40 ft³/s (0.011 m³/s) Oct. 24-27.

Period of record: Maximum discharge, 4,500 ft³/s (127 m³/s) Jan. 23, 1970 (gage height, 8.30 ft or 2.530 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of slope-area measurement of maximum flow; no flow on many days in 1972.

REMARKS.--No regulation or diversion above station.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	.70	1.2	3.8	281	12	43	15	7.2	2.6	.90	.90
2	.90	.60	2.1	3.4	264	17	41	14	7.2	2.6	.80	.80
3	.90	.60	9.1	3.1	94	13	40	14	7.1	2.6	.80	.80
4	.90	.60	19	2.9	179	11	44	15	6.1	2.6	.80	.80
5	.90	.60	5.7	3.0	41	12	42	14	5.4	2.6	.80	.80
6	.90	.60	4.5	4.6	38	16	48	13	5.5	2.6	.80	.80
7	.90	.60	3.5	5.3	112	366	42	12	5.1	2.4	.80	.70
8	.90	1.0	3.2	4.7	418	307	37	12	4.9	2.1	.80	.70
9	.90	.90	2.7	4.4	418	84	33	12	4.6	1.9	.90	.70
10	.90	.90	2.5	4.0	185	86	30	12	4.0	1.7	.90	.70
11	.80	.90	2.2	3.8	60	59	29	11	3.8	1.8	.90	1.0
12	.80	.80	2.2	3.5	534	46	26	11	3.8	1.7	.90	1.2
13	.80	.80	2.1	3.3	816	42	25	9.7	3.6	1.5	.90	1.2
14	.80	.70	2.1	3.1	115	51	24	9.7	3.2	1.4	.90	1.2
15	.80	.70	2.1	3.0	62	44	24	9.9	3.1	1.7	.90	1.2
16	.80	.80	2.1	2.9	44	133	24	10	3.2	2.0	.90	1.2
17	.80	.80	2.1	3.0	34	129	24	10	3.4	2.5	.90	1.2
18	.80	.80	2.1	3.0	28	387	22	9.4	3.1	2.1	1.0	1.0
19	.80	.80	1.9	2.7	29	267	21	9.3	3.1	1.6	1.0	1.0
20	.80	.80	1.9	2.5	28	102	20	9.2	3.3	1.5	1.0	1.0
21	.70	1.6	1.9	2.5	21	527	18	9.1	3.2	1.5	1.0	.90
22	.80	2.0	1.8	2.4	17	251	18	8.9	2.9	1.4	1.0	.90
23	.60	1.4	1.8	2.2	17	135	17	9.0	2.7	1.3	1.0	.90
24	.40	1.2	1.8	2.2	14	134	29	8.8	3.0	1.1	1.1	.80
25	.40	1.2	1.8	2.5	15	166	28	8.3	3.4	.90	1.0	.80
26	.40	1.2	1.8	2.5	13	86	20	8.0	3.3	1.0	.90	.80
27	.40	1.2	8.5	2.5	12	73	17	8.0	2.9	.90	.80	.80
28	1.3	1.3	43	2.5	12	63	16	7.8	2.9	.80	.80	.70
29	1.0	1.2	9.8	2.8	---	57	15	7.7	2.7	1.0	.80	.70
30	.70	1.2	5.8	2.5	---	52	15	7.6	2.5	1.0	.80	.70
31	.70	---	4.4	10	---	67	---	7.3	---	.90	.80	---
TOTAL	24.40	28.50	156.7	104.6	3903	3751	832	322.7	120.2	53.30	27.60	26.90
MEAN	.79	.95	5.05	3.37	139	121	27.7	10.4	4.01	1.72	.89	.90
MAX	1.3	2.0	43	10	816	527	48	15	7.2	2.6	1.1	1.2
MIN	.40	.60	1.2	2.2	12	11	15	7.3	2.5	.80	.80	.70
AC-FT	48	57	311	207	7740	7440	1650	640	238	106	55	53

CAL YR 1974 TOTAL 14832.40 MEAN 40.6 MAX 775 MIN .40 AC-FT 29420
WTR YR 1975 TOTAL 9350.90 MEAN 25.6 MAX 816 MIN .40 AC-FT 18550

Peak discharge (base, 1,000 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-8	2100	5.61	1,340	3-7	1200	5.56	1,300
2-13	0400	6.11	1,760	3-21	1730	6.32	1,960

11453570 ADAMS CREEK NEAR KNOXVILLE, CALIF.

LOCATION.--Lat 38°42'17", long 122°17'44", in NE¼NE¼ sec.21, T.10 N., R.4 W., Napa County, on left bank 20 ft (6 m) downstream from road ford, 0.2 mi (0.3 km) upstream from mouth, 8.8 mi (14.2 km) southeast of Knoxville, and 18 mi (29 km) southeast of Middletown.

DRAINAGE AREA.--7.42 mi² (19.22 km²).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 480 ft (146 m), from topographic map.

AVERAGE DISCHARGE.--6 years, 3.79 ft³/s (0.107 m³/s), 2,750 acre-ft/yr (3.39 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 399 ft³/s (11.3 m³/s) Mar. 21 (gage height, 3.67 ft or 1.119 m), from rating curve extended above 61 ft³/s (1.73 m³/s); no flow many days.
Period of record: Maximum discharge, 745 ft³/s (21.1 m³/s) Jan. 25, 1970 (gage height, 4.85 ft or 1.478 m), from rating curve extended above 53 ft³/s (1.50 m³/s) on basis of slope-area measurement of maximum flow; no flow many days in each year.

REMARKS.--No storage or diversion above station.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.50	.90	.70	9.2	5.5	8.2	5.7	1.3	.40	0	
2	.10	.50	2.2	.70	15	5.2	7.9	5.7	1.3	.50	0	
3	.10	.50	5.7	.60	5.5	3.1	7.7	5.3	1.2	.50	0	
4	.10	.40	2.4	.60	9.7	2.8	7.7	5.2	1.2	.50	0	
5	.10	.50	.70	.60	3.6	3.0	7.7	5.7	1.2	.60	0	
6	.10	.50	.50	.80	3.5	3.6	7.7	5.7	1.1	.50	0	
7	.10	.60	.40	.70	11	19	7.7	5.7	1.1	.40	0	
8	.10	.60	.40	.70	25	52	7.7	5.7	.90	.30	0	
9	.10	.60	.40	.60	25	11	7.7	5.6	.90	.30	0	
10	.10	.60	.40	.60	14	12	7.4	5.2	.80	.30	0	
11	.10	.60	.40	.60	8.6	8.0	7.2	5.3	.80	.30	0	
12	.10	.60	.40	.50	75	4.9	7.2	5.3	.70	.30	.10	
13	.10	.60	.40	.50	50	4.8	7.2	5.3	.70	.20	.10	
14	.10	.60	.40	.50	12	5.0	7.2	5.3	.70	.20	.10	
15	.10	.60	.40	.50	9.5	4.6	7.0	5.3	.70	.20	.10	
16	.10	.60	.40	.50	9.0	5.5	6.7	5.3	.70	.60	.10	
17	.10	.70	.30	.40	8.4	5.4	6.7	5.1	.60	.40	.10	
18	.10	.70	.40	.40	8.2	20	6.7	4.9	.60	.30	.10	
19	.10	.70	.40	.40	8.2	12	6.7	4.8	.70	.20	.10	
20	.10	.70	.40	.40	6.5	8.1	6.7	4.6	.70	.20	.10	
21	.10	1.2	.40	.30	4.8	74	6.7	4.6	.70	.20	.10	
22	.10	1.4	.40	.30	4.4	19	6.7	4.6	.60	.10	0	
23	.10	1.2	.40	.40	4.4	12	6.7	4.2	.60	.10	0	
24	.10	1.2	.40	.40	4.4	11	7.0	4.2	.70	.10	0	
25	.10	1.2	.40	.40	4.4	13	7.2	2.8	.70	.10	0	
26	.10	1.2	.40	.40	4.4	8.4	7.2	1.8	.70	.10	0	
27	.20	1.2	2.4	.50	4.4	8.2	7.0	1.8	.60	0	0	
28	.40	1.1	6.0	.50	4.8	8.2	6.3	1.6	.40	0	0	
29	.40	1.1	1.3	.60	---	8.2	5.9	1.6	.40	0	0	
30	.40	1.1	.70	.70	---	8.2	5.7	1.5	.40	0	0	
31	.50	---	.60	2.1	---	8.2	---	1.5	---	0	0	---
TOTAL	4.50	23.60	31.30	17.90	352.9	373.9	213.1	136.9	23.70	7.90	1.00	0
MEAN	.15	.79	1.01	.58	12.6	12.1	7.10	4.42	.79	.25	.032	0
MAX	.50	1.4	6.0	2.1	75	74	8.2	5.7	1.3	.60	.10	0
MIN	.10	.40	.30	.30	3.5	2.8	5.7	1.5	.40	0	0	0
AC-FT	8.9	47	62	36	700	742	423	272	47	16	2.0	0

CAL YR 1974 TOTAL 1665.50 MEAN 4.56 MAX 96 MIN 0 AC-FT 3300
WTR YR 1975 TOTAL 1186.70 MEAN 3.25 MAX 75 MIN 0 AC-FT 23

Peak discharge (base, 100 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-8	2230	2.51	101	3-8	0330	3.00	232
2-12	1700	2.99	229	3-21	1600	3.67	399

11453580 NEVADA CREEK NEAR KNOXVILLE, CALIF.

LOCATION.--Lat 38°42'42", long 122°17'31", in NW¼SW¼ sec.15, T.10 N., R.4 W., Napa County, on right bank 150 ft (46 m) downstream from road ford, 0.6 mi (1.0 km) upstream from Adams Creek, 8.4 mi (13.5 km) southeast of Knoxville, and 18 mi (29 km) southeast of Middletown.

DRAINAGE AREA.--7.06 mi² (18.29 km²).

PERIOD OF RECORD.--September 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 500 ft (152 m), from topographic map.

AVERAGE DISCHARGE.--6 years, 3.42 ft³/s (0.0969 m³/s), 2,480 acre-ft/yr (3.06 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 395 ft³/s (11.2 m³/s) Mar. 21 (gage height, 3.54 ft or 1.079 m), from rating curve extended as explained below; no flow many days.
Period of record: Maximum discharge, 841 ft³/s (23.8 m³/s) Jan. 23, 1970 (gage height, 7.75 ft or 2.362 m), from rating curve extended above 110 ft³/s (3.12 m³/s) on basis of slope-area measurement of maximum flow; no flow many days in each year.

REMARKS.--No regulation or diversion above station.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

REVISIONS.--Revised figures of discharge, in cubic feet per second, for the water year 1973, superseding those published in WRD Calif. 1973, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1973		1973-Con.		1973-Con.		1973-Con.		1973-Con.	
Jan. 17	30	Feb. 6	79	Feb. 26	32	Mar. 18	7.6	Apr. 7	4.3
18	115	7	51	27	62	19	11	8	4.3
19	19	8	18	28	24	20	15	9	4.3
20	12	9	26	Mar. 1	16	21	20	10	4.1
21	13	10	41	2	14	22	11	11	4.1
22	7.6	11	24	3	27	23	8.9	12	3.9
23	5.9	12	26	4	18	24	8.2	13	4.1
24	5.4	13	23	5	14	25	7.9	14	3.9
25	5.0	14	24	6	39	26	7.3	15	3.7
26	4.5	15	16	7	18	27	6.7	16	3.7
27	3.9	16	15	8	15	28	6.2	17	3.5
28	3.7	17	12	9	13	29	6.2		
29	23	18	11	10	12	30	6.4		
30	22	19	10	11	11	31	5.9		
31	6.4	20	8.9	12	11	Apr. 1	5.4		
Feb. 1	5.2	21	8.5	13	9.6	2	5.4		
2	4.7	22	7.9	14	9.2	3	5.2		
3	5.7	23	7.6	15	8.5	4	5.0		
4	8.9	24	22	16	8.2	5	5.0		
5	6.7	25	16	17	7.9	6	4.7		

Month	Ft³/s-days	Maximum	Minimum	Mean	Acre-feet
January 1973	761.54	183	0.26	24.6	1,510
February	594.1	79	4.7	21.2	1,180
March	379.7	39	5.9	12.2	753
April	104.6	5.4	3.5	3.49	207
WTR YR 1973	1,988.24	183	0	5.45	3,940
CAL YR 1973	2,150.17	183	0	5.89	4,260

11453580 NEVADA CREEK NEAR KNOXVILLE, CALIF.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0		8.6	1.5	1.7	.30	.10	.10		
2			0		14	2.0	1.5	.30	.10	.10		
3			.10		5.4	1.5	1.5	.30	.10	.10		
4			0		7.7	1.3	1.7	.30	.10	.10		
5			0		2.9	1.6	1.8	.30	.10	.10		
6			0		2.4	2.1	1.6	.30	.10	.10		
7			0		6.4	4.[illegible]	1.2	.20	.10	.10		
8			0		17	52	1.1	.20	.10	.10		
9			0		22	12	1.0	.20	.10	.10		
10			0		14	10	.90	.20	.10	.10		
11			0		6.4	4.2	.80	.20	.10	.10		
12			0		75	4.6	.70	.20	.10	0		
13			0		35	5.0	.60	.20	.10	.10		
14			0		14	5.6	.70	.20	.10	.10		
15			0		8.9	4.7	.70	.20	.10	.10		
16			0		8.3	8.3	.60	.20	.10	.10		
17			0		5.0	8.5	.60	.20	.10	.10		
18			0		4.0	35	.60	.10	.10	.10		
19			0		3.7	19	.60	.20	.10	.10		
20			0		3.1	11	.60	.10	.10	.10		
21			0		2.6	75	.50	.10	.10	.10		
22			0		2.3	22	.50	.10	.10	0		
23			0		2.1	8.9	.50	.10	.10	.10		
24			0		2.1	7.6	1.1	.10	.10	0		
25			0		1.9	11	.70	.10	.10	0		
26			0		1.6	4.7	.50	.10	.10	0		
27			.10		1.6	3.8	.40	.10	.10	0		
28			0		1.5	3.8	.40	.10	.10	0		
29			0		---	2.7	.40	.10	.10	0		
30			0		---	2.4	.30	.10	.10	0		
31		---	0		---	2.0	---	.10	---	0		---
TOTAL	0	0	.20	0	279.5	337.2	25.80	5.50	3.00	2.10	0	0
MEAN	0	0	.007	0	9.98	10.9	.86	.18	.10	.068	0	0
MAX	0	0	.10	0	75	75	1.8	.30	.10	.10	0	0
MIN	0	0	0	0	1.5	1.3	.30	.10	.10	0	0	0
AC-FT	0	0	.4	0	554	669	51	11	6.0	4.2	0	0

CAL YR 1974 TOTAL 1288.90 MEAN 3.53 MAX 129 MIN 0 AC-FT 2560
WTR YR 1975 TOTAL 653.30 MEAN 1.79 MAX 75 MIN 0 AC-FT 1300

Peak discharge (base, 100 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-12	unknown	--	unknown	3-21	1630	5.54	395
3-8	unknown	--	unknown				

11453600 POPE CREEK NEAR POPE VALLEY, CALIF.

LOCATION.--Lat 38°37'48", long 122°19'52", in SW¼ sec.17, T.9 N., R.4 W., Napa County, on left bank 0.2 mi (0.3 km) upstream from Lake Berryessa, 0.7 mi (1.1 km) downstream from Maxwell Creek, and 5.2 mi (8.4 km) east of Pope Valley.

DRAINAGE AREA.--78.3 mi^2 (202.8 km^2).

PERIOD OF RECORD.--December 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 450 ft (137 m), from topographic map.

AVERAGE DISCHARGE.--14 years (1961-75), 95.0 ft^3/s (2.690 m^3/s), 68,830 acre-ft/yr (84.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 7,360 ft^3/s (208 m^3/s) Mar. 21 (gage height, 13.65 ft or 4.161 m); minimum daily, 0.60 ft^3/s (0.017 m^3/s) Aug. 12, 23-25.
Period of record: Maximum discharge, 18,000 ft^3/s (510 m^3/s) Jan. 31, 1963 (gage height, 19.79 ft or 6.032 m), from rating curve extended above 7,700 ft^3/s (218 m^3/s); no flow many days in 1960-68, 1971-73.

REMARKS.--Flow regulated by Dick Weeks Reservoir, increased to 2,000 acre-ft (2.47 hm^3) of usable storage in December 1973, and several smaller reservoirs with additional storage of about 600 acre-ft (740,000 m^3).

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	7.8	5.7	11	209	32	101	26	4.6	2.4	1.5	.80
2	5.7	5.0	7.9	9.0	602	53	88	23	6.2	2.6	1.3	.80
3	6.0	3.4	21	8.0	281	41	87	21	7.5	2.6	1.2	.80
4	6.8	1.9	40	7.4	481	34	99	20	5.7	2.6	1.0	.80
5	7.0	1.9	15	7.0	220	36	106	19	5.3	2.7	.90	.70
6	6.8	1.5	10	101	178	39	118	20	5.6	2.6	.90	.70
7	7.5	1.8	8.8	58	544	735	99	18	6.3	2.5	.80	.80
8	8.2	2.2	7.3	141	916	1010	78	18	6.1	2.4	.80	.80
9	8.2	1.7	6.6	44	1340	332	72	17	5.4	2.1	.70	.90
10	7.6	1.8	6.0	26	834	323	64	15	5.0	2.0	.70	1.2
11	7.5	1.6	5.4	18	266	206	58	14	4.3	2.0	.70	1.1
12	7.2	1.6	5.2	13	1790	140	51	14	4.3	2.0	.60	1.0
13	7.9	1.5	4.9	10	2400	123	47	12	4.2	1.9	.70	1.0
14	8.6	1.5	4.5	7.9	469	124	44	11	3.7	1.9	.70	.90
15	7.9	1.6	4.3	6.4	241	177	41	12	3.7	2.4	.70	.80
16	8.9	1.8	4.1	5.7	163	320	43	13	4.1	3.0	.90	.70
17	9.2	2.0	4.1	4.4	121	437	42	11	4.5	3.0	1.0	.80
18	8.6	2.6	4.1	4.1	92	1270	39	11	5.2	2.7	.90	.80
19	8.2	2.6	4.1	3.6	144	865	35	10	5.4	2.4	.90	.80
20	8.0	2.8	4.1	3.0	148	402	33	9.4	5.1	2.2	1.0	.80
21	7.7	5.0	3.9	2.8	91	1990	31	9.1	3.7	1.9	.80	.80
22	7.5	12	3.7	2.4	70	1030	29	8.6	3.1	1.7	.70	1.1
23	7.5	8.8	3.6	2.4	58	442	30	8.6	3.0	1.6	.60	1.0
24	8.1	5.7	3.6	2.2	51	485	89	8.7	3.3	1.6	.60	.80
25	8.4	6.0	3.6	2.2	47	973	81	7.8	3.0	1.6	.60	.90
26	9.0	5.0	3.6	2.0	40	382	45	7.7	2.9	1.5	.70	2.3
27	9.9	4.5	66	2.0	37	266	41	7.5	2.7	1.3	.70	5.0
28	14	4.0	182	2.0	34	205	37	7.0	2.8	1.3	.80	3.6
29	11	3.7	37	2.0	---	166	30	6.3	2.5	1.6	.70	2.8
30	10	3.5	20	5.0	---	147	27	6.3	2.3	1.6	.70	2.5
31	10	---	14	42	---	119	---	5.5	---	1.6	.80	---
TOTAL	255.1	106.8	514.1	555.5	11867	12904	1785	397.5	131.5	65.3	25.60	37.80
MEAN	8.23	3.56	16.6	17.9	424	416	59.5	12.8	4.38	2.11	.83	1.26
MAX	14	12	182	141	2400	1990	118	26	7.5	3.0	1.5	5.0
MIN	5.7	1.5	3.6	2.0	34	32	27	5.5	2.3	1.3	.60	.70
AC-FT	506	212	1020	1100	23540	25600	3540	788	261	130	51	75

CAL YR 1974 TOTAL 40704.60 MEAN 112 MAX 2370 MIN .50 AC-FT 80740
WTR YR 1975 TOTAL 28645.20 MEAN 78.5 MAX 2400 MIN .60 AC-FT 56820

11453900 LAKE BERRYESSA NEAR WINTERS, CALIF.

LOCATION.--Lat 38°30'48", long 122°06'13", in SE¼NW¼ sec.29, T.8 N., R.2 W., Napa County, near center of Monticello Dam on Putah Creek, 7.4 mi (11.9 km) west of Winters.

DRAINAGE AREA.--566 mi² (1,466 km²).

PERIOD OF RECORD.--January 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents, 1,636,000 acre-ft (2.02 km³) Mar. 25 (elevation, 441.74 ft or 134.642 m); minimum, 1,376,000 acre-ft (1.70 km³) Nov. 28 to Dec. 2, Dec. 26 (elevation, 427.91 ft or 130.427 m).

Period of record: Maximum contents, 1,733,000 acre-ft (2.14 km³) Jan. 24, 1970 (elevation, 446.67 ft or 136.415 m); minimum since irrigation pool first filled, 1,077,900 acre-ft (1.33 km³) Oct. 10, 11, 1962 (elevation, 410.60 ft or 125.151 m).

REMARKS.--Reservoir is formed by concrete arch-gravity dam completed November 1956. Usable capacity, 1,592,000 acre-ft (1.96 km³) between elevations 253.25 ft (77.191 m), invert of outlet valves and 440 ft (134.1 m), crest of glory-hole spillway, above mean sea level. Dead storage, 10,340 acre-ft (12.7 hm³). Water is released down Putah Creek and is diverted into Putah South diversion canal for irrigation of about 46,000 acres (186 km²) in the lower Sacramento Valley. Total diverted during year was 223,000 acre-ft (275 hm³). Releases for irrigation began in May 1959. Records, including extremes, show total contents at 2400 hours.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey, rounded to Geological Survey standards.

REVISIONS (WATER YEARS).--WSP 1735: 1958-60. WSP 1931: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

400	911,200
410	1,068,000
420	1,236,000
430	1,414,000
450	1,800,000

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1404000	1382000	1376000	1381000	1394000	1538000	1627000	1612000	1571000	1519000	1467000	1416000
2	1403000	1382000	1376000	1381000	1402000	1539000	1626000	1611000	1569000	1517000	1466000	1414000
3	1402000	1381000	1379000	1381000	1407000	1540000	1625000	1610000	1568000	1515000	1464000	1413000
4	1401000	1381000	1380000	1381000	1413000	1541000	1625000	1609000	1566000	1513000	1462000	1412000
5	1400000	1381000	1380000	1381000	1416000	1541000	1624000	1608000	1564000	1512000	1460000	1411000
6	1440000	1380000	1380000	1381000	1418000	1543000	1624000	1608000	1562000	1510000	1458000	1409000
7	1399000	1380000	1380000	1382000	1423000	1552000	1623000	1606000	1561000	1509000	1456000	1408000
8	1398000	1380000	1379000	1383000	1437000	1563000	1623000	1606000	1559000	1507000	1454000	1406000
9	1397000	1380000	1379000	1383000	1454000	1567000	1622000	1605000	1557000	1506000	1453000	1405000
10	1396000	1380000	1379000	1384000	1464000	1571000	1621000	1604000	1556000	1504000	1451000	1404000
11	1395000	1380000	1379000	1384000	1467000	1573000	1621000	1603000	1554000	1503000	1449000	1402000
12	1394000	1379000	1379000	1384000	1486000	1575000	1620000	1602000	1552000	1501000	1447000	1401000
13	1394000	1379000	1379000	1384000	1514000	1577000	1619000	1600000	1551000	1499000	1446000	1400000
14	1393000	1379000	1379000	1384000	1520000	1578000	1618000	1599000	1549000	1497000	1444000	1398000
15	1393000	1379000	1379000	1284000	1525000	1582000	1618000	1598000	1547000	1496000	1442000	1397000
16	1392000	1379000	1379000	1384000	1527000	1585000	1617000	1596000	1545000	1495000	1440000	1396000
17	1391000	1378000	1379000	1384000	1528000	1588000	1616000	1595000	1543000	1494000	1438000	1395000
18	1390000	1378000	1379000	1383000	1530000	1601000	1616000	1594000	1541000	1492000	1437000	1394000
19	1390000	1378000	1379000	1383000	1531000	1610000	1616000	1593000	1539000	1490000	1436000	1393000
20	1389000	1378000	1378000	1383000	1533000	1610000	1615000	1590000	1538000	1489000	1434000	1392000
21	1387000	1378000	1378000	1383000	1534000	1630000	1614000	1589000	1536000	1487000	1432000	1390000
22	1387000	1378000	1378000	1383000	1534000	1636000	1614000	1587000	1535000	1486000	1431000	1390000
23	1386000	1377000	1377000	1383000	1535000	1634000	1614000	1586000	1533000	1484000	1429000	1389000
24	1385000	1377000	1377000	1383000	1535000	1633000	1614000	1584000	1530000	1482000	1428000	1388000
25	1384000	1377000	1377000	1383000	1536000	1636000	1614000	1583000	1529000	1480000	1427000	1387000
26	1384000	1377000	1376000	1383000	1537000	1633000	1614000	1581000	1528000	1478000	1425000	1386000
27	1384000	1377000	1381000	1383000	1537000	1631000	1614000	1580000	1526000	1477000	1423000	1385000
28	1384000	1376000	1382000	1383000	1538000	1630000	1614000	1578000	1525000	1475000	1422000	1384000
29	1384000	1376000	1382000	1383000	---	1629000	1613000	1576000	1523000	1473000	1420000	1383000
30	1383000	1376000	1382000	1382000	---	1629000	1612000	1574000	1521000	1470000	1418000	1381000
31	1383000	---	1381000	1385000	---	1628000	---	1572000	---	1469000	1417000	---
MAX	1440000	1382000	1382000	1385000	1538000	1636000	1627000	1612000	1571000	1519000	1467000	1416000
MIN	1383000	1376000	1376000	1381000	1394000	1538000	1612000	1572000	1521000	1469000	1417000	1381000
(a)	428.28	427.89	428.20	428.40	436.62	441.32	440.52	438.45	435.73	432.95	430.16	428.20
(b)	-22,000	-7,100	+5,700	+3,600	+152,600	+90,200	-15,500	-39,800	-51,700	-52,100	-51,600	-35,700
(c)	6,258	2,057	1,476	1,797	2,115	4,052	5,516	11,990	13,746	12,569	10,826	8,382

CAL YR 1974 b -179,000
WTR YR 1975 b -2,400

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11454000 PUTAH CREEK NEAR WINTERS, CALIF.

LOCATION.--Lat 38°30'55", long 122°04'51", in NE¼NE¼ sec.28, T.8 N., R.2 W., Yolo County, on left bank 1 mi (2 km) downstream from Cold Canyon, 1.3 mi (2.1 km) downstream from Monticello Dam, and 6 mi (10 km) west of Winters.

DRAINAGE AREA.--574 mi² (1,487 km²).

PERIOD OF RECORD.--July 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 160.75 ft (48.997 m) above mean sea level (river-profile survey). June 28, 1930, to Feb. 29, 1940, at datum about 1 ft (0.3 m) higher.

AVERAGE DISCHARGE (adjusted for change in contents and evaporation from Lake Berryessa).--45 years, 528 ft³/s (14.95 m³/s), 382,500 acre-ft/yr (472 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,870 ft³/s (110 m³/s) Mar. 25 (gage height, 12.98 ft or 3.956 m); minimum daily, 12 ft³/s (0.34 m³/s) Feb. 25.

Period of record: Maximum discharge, 81,000 ft³/s (2,290 m³/s) Feb. 27, 1940 (gage height, 30.5 ft or 9.30 m, present datum), from rating curve extended above 30,000 ft³/s (850 m³/s); no flow Sept. 6-15, 1950, July 26 to Sept. 1, Sept. 6-9, 1955. Maximum discharge since construction of Monticello Dam in 1957, 16,300 ft³/s (462 m³/s) Jan. 24, 1970 (gage height, 18.85 ft or 5.745 m); minimum daily, 6.1 ft³/s (0.17 m³/s) Dec. 19, 1967.

Maximum stage known since at least 1905, that of Feb. 27, 1940, on basis of records for station at Winters.

REMARKS.--Records good. Flow regulated by Lake Berryessa beginning January 1957 (see sta 11453900).

REVISIONS (WATER YEARS).--WSP 901: 1937-38(M). WSP 1285: 1932(M), 1935-36(M), 1940(M), 1942-43(M), 1951, 1952(M). WSP 1565: 1957. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	349	74	59	43	96	51	1180	499	809	763	750	542
2	349	70	49	44	84	57	1120	535	793	796	742	553
3	340	71	36	48	25	53	1050	525	773	793	732	586
4	318	73	22	56	93	48	1000	511	742	773	724	575
5	306	75	34	56	56	48	977	481	745	741	728	573
6	294	74	45	57	55	49	961	494	781	692	770	579
7	294	70	51	57	79	72	923	588	748	703	785	560
8	332	70	64	57	85	99	881	657	760	741	741	556
9	324	69	49	56	130	52	844	623	748	764	709	560
10	288	68	26	56	112	44	800	598	763	752	684	560
11	271	66	26	56	64	36	753	588	766	718	684	548
12	271	66	26	56	54	38	705	625	745	723	738	524
13	277	66	40	56	151	46	668	686	797	732	764	493
14	290	66	53	56	49	38	640	734	824	759	726	464
15	292	65	51	56	30	29	583	717	766	730	715	449
16	292	66	50	56	23	52	553	703	752	644	696	463
17	300	67	50	42	18	37	526	687	754	591	638	463
18	304	65	50	30	16	44	498	712	743	584	613	442
19	310	65	50	31	20	1260	469	737	748	602	571	424
20	308	66	50	43	48	2120	447	716	745	626	609	418
21	292	70	50	52	79	2410	428	725	717	666	656	406
22	284	70	51	58	74	3750	423	776	742	699	648	396
23	271	70	50	58	46	3780	399	810	745	736	654	395
24	262	71	53	58	18	3600	402	795	733	786	657	390
25	246	72	55	58	12	3770	424	785	711	801	633	386
26	230	72	55	58	26	3620	395	784	695	774	666	404
27	217	71	55	56	51	2440	412	784	697	780	655	418
28	154	68	55	56	44	1420	446	775	733	798	619	418
29	97	67	55	58	---	1360	443	791	732	806	625	418
30	96	62	55	59	---	1300	456	823	739	789	613	412
31	87	---	50	65	---	1260	---	850	---	777	573	---
TOTAL	8345	2065	1465	1648	1638	32983	19806	21114	22546	22639	21118	14375
MEAN	269	68.8	47.3	53.2	58.5	1064	660	681	752	730	681	479
MAX	349	75	64	65	151	3780	1180	850	824	806	785	586
MIN	87	62	22	30	12	29	395	481	695	584	571	386
AC-FT	16550	4100	2910	3270	3250	65420	39290	41880	44720	44900	41890	28510

CAL YR 1974 TOTAL 314402 MEAN 861 MAX 7150 MIN 22 AC-FT 623600 MEAN a 728 AC-FT a 527,200
WTR YR 1975 TOTAL 169742 MEAN 465 MAX 3780 MIN 12 AC-FT 336700 MEAN a 544 AC-FT a 394,100

a Adjusted for change in contents and evaporation from Lake Berryessa.

11454000 PUTAH CREEK NEAR WINTERS, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water year 1952 (partial-record station), October 1952 to September 1966, October 1972 to September 1974, water year 1975 (partial-record station).
Water temperatures: November 1965 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 15.5°C Apr. 21; minimum, 8.0°C Jan. 30, Feb. 1-4.
Period of record:
Water temperatures: Maximum, 22.0°C May 21, 1967; minimum (1966-68, 1969 to current year), 6.5°C on several days in 1967, 1968, and 1973.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. Clock stopped Apr. 1, 2; range in temperature, 11.0°C to 11.5°C.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
DEC. 30...	1050	55	16	12	166	2	139	6.9
MAR. 03...	1215	50	20	12	186	0	153	10
JUNE 12...	1330	733	--	8.2	172	0	141	--
SEP. 11...	1315	540	16	8.6	172	0	141	5.3

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED BORON (B) (UG/L)
DEC. 30...	194	.26	28.8	154	14	--	200
MAR. 03...	222	.30	30.0	166	13	--	300
JUNE 12...	181	.25	358	150	9	.3	--
SEP. 11...	170	.23	248	147	6	--	--

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
OCT. 22...	1200	284	294	7.9	12.0	--	11.4
DEC. 30...	1050	55	304	8.0	10.5	2	10.9
MAR. 03...	1215	50	343	8.0	11.5	5	11.6
JUNE 12...	1330	733	287	8.2	12.0	4	12.2
SEP. 11...	1315	540	281	8.2	13.5	0	11.6

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	12.0	11.5	11.0	11.0	10.0	10.0	8.5	8.0	11.5	10.5
2	---	---	12.0	11.0	11.0	11.0	10.0	10.0	8.0	8.0	11.0	10.0
3	---	---	12.0	11.0	11.5	11.5	10.0	10.0	9.0	8.0	11.0	10.0
4	---	---	12.0	11.5	12.0	11.5	10.5	10.0	9.0	8.0	11.0	10.0
5	---	---	12.0	11.5	11.5	11.0	10.5	10.5	9.5	9.0	11.0	10.5
6	---	---	12.0	11.5	11.5	11.0	11.0	10.5	10.0	9.5	11.0	10.5
7	---	---	12.0	12.0	11.5	11.5	11.0	11.0	10.5	10.0	11.0	11.0
8	---	---	12.0	11.5	11.5	11.5	12.0	11.0	11.0	10.5	11.0	11.0
9	---	---	12.0	11.5	11.5	11.0	11.0	10.0	11.0	10.5	11.0	11.0
10	---	---	12.0	12.0	11.0	10.5	11.0	10.5	10.5	10.0	11.0	10.5
11	---	---	12.0	11.5	10.5	10.5	11.5	10.5	10.5	10.0	11.5	10.0
12	---	---	12.0	11.5	10.5	10.5	11.0	10.0	10.0	10.0	12.0	11.0
13	---	---	12.0	11.5	11.0	10.5	11.0	10.0	11.0	10.0	11.0	9.5
14	---	---	12.0	11.5	11.0	10.5	11.0	10.0	11.0	9.5	11.0	9.5
15	---	---	12.0	11.5	11.5	11.0	10.0	9.5	10.0	9.0	11.0	10.5
16	---	---	12.0	11.5	11.5	11.5	10.5	9.5	10.0	9.0	10.5	9.5
17	12.0	11.5	11.5	11.5	11.5	11.0	10.5	9.5	9.5	9.0	10.0	9.5
18	12.0	11.5	12.0	11.5	11.0	10.5	10.5	9.5	9.5	8.5	11.5	10.0
19	12.0	11.5	12.0	11.5	11.0	10.5	10.5	9.5	10.0	9.5	11.5	10.0
20	12.0	11.5	11.5	11.5	11.0	11.0	10.5	9.5	11.0	9.5	10.5	10.0
21	12.0	11.5	12.0	11.5	11.0	11.0	10.5	9.5	10.0	9.0	10.5	10.5
22	12.0	11.5	12.0	11.5	11.0	11.0	10.5	10.0	10.0	9.0	11.0	10.5
23	12.0	11.5	11.5	11.0	11.0	10.5	10.5	9.5	10.5	9.5	11.0	11.0
24	12.0	11.5	11.5	11.5	11.0	10.5	10.5	10.0	11.0	10.0	11.0	11.0
25	12.0	11.5	12.0	11.5	10.5	10.5	10.5	10.0	11.5	10.0	11.0	11.0
26	12.0	11.5	12.0	11.5	10.5	10.5	11.0	10.0	12.5	10.5	11.0	11.0
27	12.0	12.0	11.5	11.0	10.5	10.5	10.0	9.5	11.5	10.5	11.5	11.0
28	12.0	11.5	11.5	11.0	10.5	10.5	9.5	8.5	11.5	10.5	11.5	11.0
29	12.0	11.5	11.5	11.0	10.5	10.0	9.5	8.5	---	---	11.5	11.0
30	11.5	11.5	11.0	11.0	10.5	10.0	9.0	8.0	---	---	11.5	11.0
31	11.5	11.5	---	---	10.5	10.0	8.5	8.5	---	---	11.5	11.0
MONTH	---	---	12.0	11.0	12.0	10.0	12.0	8.0	12.5	8.0	12.0	9.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	14.5	13.5	11.5	10.5	12.0	11.5	12.5	11.5	12.5	11.5
2	---	---	14.0	13.0	11.5	11.0	12.5	11.5	12.5	11.5	12.5	11.5
3	12.0	11.5	13.5	12.5	11.5	10.5	12.5	11.5	12.5	11.5	12.5	11.5
4	12.0	11.5	13.5	12.5	11.5	10.5	12.0	11.5	12.5	11.5	12.5	11.5
5	12.0	11.5	13.5	12.5	11.5	11.0	12.5	11.5	12.5	11.5	12.5	11.5
6	12.0	11.5	13.5	12.0	12.0	11.0	12.5	11.5	12.5	11.5	12.5	11.5
7	11.5	11.5	12.5	11.5	11.5	11.0	12.5	11.5	12.5	11.5	12.5	11.5
8	11.5	11.0	12.0	11.5	11.5	10.5	12.5	11.5	12.5	11.5	12.0	11.5
9	12.5	11.0	12.0	11.5	11.5	10.5	12.5	11.5	13.0	12.0	12.0	11.5
10	12.5	12.0	12.0	11.0	11.5	10.5	12.0	11.5	13.0	12.0	12.0	11.5
11	13.0	12.0	12.0	11.0	11.5	11.0	12.5	11.5	13.0	12.0	12.5	11.5
12	13.0	12.0	11.5	10.5	11.5	10.5	12.5	11.5	13.0	12.0	12.5	11.5
13	13.5	12.5	11.0	10.5	11.5	10.5	12.5	11.5	12.5	12.0	12.5	11.5
14	13.0	12.5	11.5	10.5	11.5	10.5	12.5	11.5	12.5	12.0	12.5	11.5
15	13.0	12.0	11.5	10.5	12.0	11.0	12.0	12.0	13.0	12.0	12.5	11.5
16	12.5	12.0	11.5	10.5	12.0	11.0	12.5	12.0	13.0	12.0	12.5	11.5
17	13.5	12.0	11.0	10.5	11.5	11.0	13.0	12.0	12.5	12.0	12.0	11.5
18	13.5	12.5	11.0	10.5	12.0	11.5	13.0	12.0	12.5	12.0	12.5	11.5
19	13.5	13.0	11.5	10.5	12.0	11.5	13.0	12.0	13.0	12.0	12.5	11.5
20	15.0	13.5	11.5	10.5	12.5	11.5	13.0	12.0	13.0	12.0	12.5	11.5
21	15.5	14.5	11.5	10.5	12.5	11.5	12.5	12.0	12.5	11.5	12.5	11.5
22	15.0	14.0	11.5	10.5	12.5	11.5	12.5	11.5	12.5	11.5	13.0	11.5
23	14.5	14.0	11.5	10.5	12.5	11.5	12.5	11.5	12.5	11.5	13.0	11.5
24	14.0	13.5	11.5	10.5	12.5	11.5	12.5	11.5	12.5	11.5	12.5	11.5
25	14.5	13.5	11.5	10.5	12.5	11.5	12.0	11.5	12.5	11.5	12.5	11.5
26	15.0	13.0	11.5	10.5	12.5	11.5	12.5	11.5	12.5	11.5	12.5	11.5
27	15.0	14.0	11.0	10.5	12.5	11.5	12.5	11.5	12.5	11.0	12.5	11.5
28	15.0	14.0	11.0	10.5	12.0	11.5	12.5	11.5	12.5	11.5	12.5	11.5
29	15.0	13.5	11.0	10.0	12.0	11.5	12.5	11.5	12.5	11.5	12.5	11.5
30	15.0	14.0	11.0	10.5	12.0	11.5	12.5	11.5	12.5	11.5	12.5	11.5
31	---	---	11.0	10.5	---	---	12.5	11.5	12.5	11.5	---	---
MONTH	15.5	11.0	14.5	10.0	12.5	10.5	13.0	11.5	13.0	11.0	13.0	11.5

ENVIRONMENTAL PROTECTION AGENCY INVESTIGATION OF THE SACRAMENTO RIVER DRAINAGE NEAR MATHESON, CALIF.

An investigation of the drainage into the Sacramento River near Matheson was made during the period Nov. 7, 1974, to Nov. 11, 1975. This investigation was part of the nationwide stream and lake study by the Environmental Protection Agency. There have been no previous measurements at these sites.

Stream	Tributary to	Location	Date	Discharge
Spring Creek above Boulder Creek	Sacramento River	SW¼NW¼ sec.1, T.32 N., R.6 W., Shasta County, 50 ft (15 m) upstream from Boulder Creek and 1.8 mi (2.9 km) west of Matheson.	11-7-75	3.24
			2-7-75	48.3
			5-12-75	13.8
			7-14-75	2.05
Boulder Creek	Spring Creek	SW¼NW¼ sec.1, T.32 N., R.6 W., Shasta County, 50 ft (15 m) upstream from Spring Creek and 1.9 mi (3.1 km) west of Matheson.	11-7-74	5.26
			2-7-75	20.5
			5-12-75	4.97
			6-23-75	1.22
			7-3-75	1.17
			7-14-75	.50
			11-11-75	.68
Spring Creek below Boulder Creek	Sacramento River	SW¼NW¼ sec.1, T.32 N., R.6 W., Shasta County, 100 ft (30 m) downstream from Boulder Creek and 1.9 mi (3.1 km) west of Matheson.	2-7-75	70.0
			5-12-75	19.1
			6-23-75	4.87
			7-3-75	4.22
			11-11-75	3.88
Slick Rock Creek at mouth	Spring Creek	SE¼ sec.2, T.32 N., R.6 W., Shasta County, 1,900 ft (579 m) downstream from Boulder Creek and 2.1 mi (3.4 km) west of Matheson.	6-23-75	0.29
Spring Creek below Slick Rock Creek	Sacramento River	SE¼ sec.2, T.32 N., R.6 W., Shasta County, 1,910 ft (582 m) downstream from Boulder Creek and 2.1 mi (3.4 km) west of Matheson.	6-23-75	5.35
Spring Creek at Spring Creek Reservoir	Sacramento River	NW¼SE¼ sec.13, T.32 N., R.6 W., Shasta County, 0.25 mi (0.40 km) downstream from South Fork and 2.7 mi (4.3 km) southwest of town of Matheson.	11-8-74	4.91
			11-21-74	7.91
			12-13-74	8.45
			2-7-75	132
			2-28-75	35.0
			4-3-75	75.4
			5-12-75	25.0
			6-2-75	9.71
			6-24-75	6.94
			7-3-75	5.39
			7-14-75	4.39
			7-31-75	2.88
			10-17-75	3.50
			10-30-75	21.3
			11-11-75	5.32

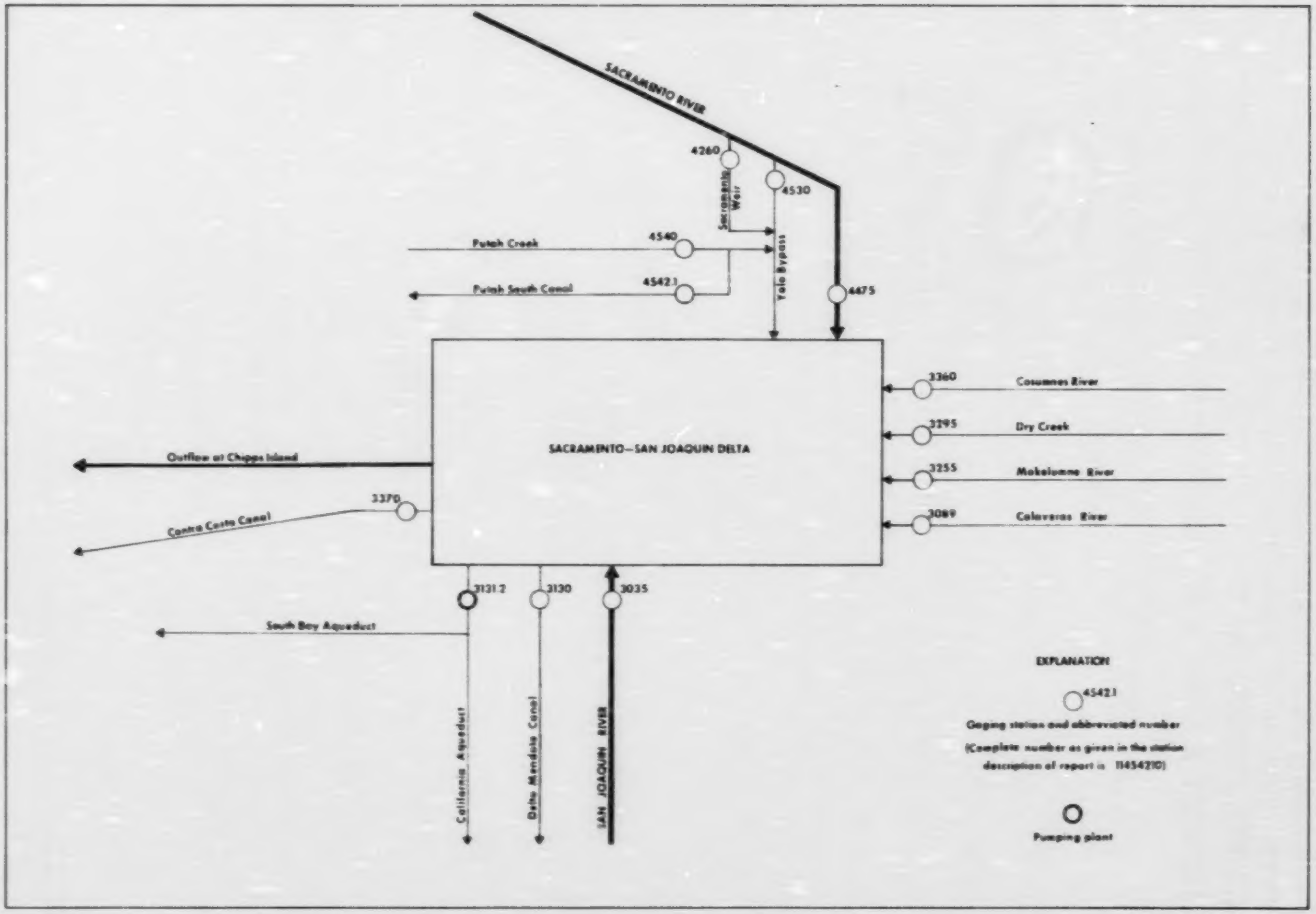

SACRAMENTO RIVER
4260
Sacramento Weir
4530
Yolo Bypass
Putah Creek
4540
Putah South Canal
4542.1
4475
SACRAMENTO–SAN JOAQUIN DELTA
3360
Cosumnes River
3295
Dry Creek
3255
Mokelumne River
3089
Calaveras River
Outflow at Chipps Island
3370
Contra Costa Canal
3131.2
3130
3035
South Bay Aqueduct
California Aqueduct
Delta Mendota Canal
SAN JOAQUIN RIVER
EXPLANATION
4542.1
Gaging station and abbreviated number
(Complete number as given in the station description of report is 11454210)
Pumping plant

FIGURE 12.—Schematic diagram showing principal inflows and diversions, Sacramento–San Joaquin Delta.

LOCATION.--See schematic diagram of inflows and diversions, Sacramento-San Joaquin Delta.

DRAINAGE AREA.--Total drainage area of inflow streams tabulated below is 39,699 mi^2 (102,820 km^2).

PERIOD OF RECORD.--October 1971 to current year. Data for periods prior to October 1971, can be obtained from published records for stations tabulated below.

COOPERATION.--Records for Delta-Mendota, Contra Costa, and Putah South Canals furnished by Bureau of Reclamation, California Aqueduct by California Department of Water Resources.

SUMMARY OF PRINCIPAL INFLOWS AND DIVERSIONS IN THE
SACRAMENTO-SAN JOAQUIN DELTA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Inflows, in thousands of acre-feet

	Month												Water year
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
11303500 SAN JOAQUIN RIVER NEAR VERNALIS	215.0	231.5	255.9	231.6	345.0	349.5	235.5	244.2	339.6	105.7	103.3	157.8	2,815
11308900 CALAVERAS RIVER BELOW NEW HOGAN DAM	3.04	21.41	25.69	1.81	5.41	99.77	3.64	10.17	11.26	12.63	11.90	7.95	214.7
11325500 MOKELUMNE RIVER AT WOODBRIDGE	39.30	26.15	11.32	5.47	4.24	28.30	60.59	55.33	46.45	25.68	26.68	33.52	363.0
11329500 DRY CREEK NEAR GALT	0	.22	.84	1.89	34.66	42.86	14.55	3.47	.21	.05	.07	.06	98.88
11336000 COSUMNES RIVER AT McCONNELL	.50	2.58	4.14	10.16	65.22	104.3	69.67	76.53	23.44	3.48	6.80	.02	366.8
11426000 SACRAMENTO WEIR SPILL	0	0	0	0	.68	1.98	0	0	0	0	0	0	2.66
11447500 SACRAMENTO RIVER AT SACRAMENTO	1,237	1,309	1,577	1,195	2,639	3,132	1,974	1,861	1,411	1,124	1,199	1,213	19,870
11453000 YOLO BYPASS NEAR WOODLAND	.71	.37	6.70	1.07	211.2	503.0	77.35	15.11	.49	.20	.07	6.33	822.6
11454000 PUTAH CREEK NEAR WINTERS	16.55	4.10	2.91	3.27	3.25	65.42	39.29	41.88	44.72	44.90	41.89	28.51	336.7
Total	1,512	1,595	1,884	1,450	3,309	4,327	2,475	2,308	1,877	1,317	1,390	1,447	24,890

Diversions, in thousands of acre-feet

	Month												Water year
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
11313000 DELTA-MENDOTA CANAL	211.5	0	.63	165.2	232.6	231.2	250.8	242.9	237.8	283.6	276.1	216.5	2,349
11313120 CALIFORNIA AQUEDUCT (DELTA PUMPING PLANT)	62.16	111.0	170.8	166.9	135.4	137.0	117.5	93.43	12.29	16.50	253.5	233.4	1,510
11337000 CONTRA COSTA CANAL	6.04	4.23	3.65	4.14	4.60	4.50	5.77	6.87	9.93	10.74	10.52	8.15	79.14
11454210 PUTAH SOUTH CANAL	14.30	2.20	1.56	1.73	1.22	3.41	18.40	38.30	40.36	38.40	36.85	25.80	222.5
Total	294.0	117.4	176.6	338.0	373.8	376.11	392.5	381.5	300.4	349.2	577.0	483.8	4,161

NOTE.--Minor inflow streams and diversions are not included.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low- or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same or practically the same site.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		SACRAMENTO RIVER BASIN				
11433430	Buckeye Canyon Creek tributary near Greenwood	SE¼NW¼ sec.3, T.12 N., R.9 E., El Dorado County, 3.3 mi (5.3 km) northwest of Greenwood and 3.5 mi (5.6 km) northeast of Cool.	0.08	1972-75	10-17-74 1-7-75 2-13-75 3-4-75 3-25-75 4-3-75 4-23-75 7-8-75	0 .071 1.06 .014 1.33 .056 .031 0
11433440	Wildcat Canyon Creek near Cool	NE¼SE¼ sec.4, T.12 N., R.9 E., El Dorado County, 3.3 mi (5.3 km) northeast of Cool and 3.5 mi (5.6 km) northwest of Greenwood.	.30	1972-75	10-17-74 1-7-75 2-13-75 4-3-75 4-22-75 7-8-75	0 .11 2.42 .17 .08 0
11433450	Browns Bar Canyon Creek near Cool	SE¼SW¼ sec.4, T.12 N., R.9 E., El Dorado County, 2.7 mi (4.3 km) northeast of Cool and 3.8 mi (6.1 km) northwest of Greenwood.	.75	1972-75	10-17-74 2-13-75 3-4-75 7-8-75	0 11.6 .27 0
11433900	Paymaster Creek near Cool	SE¼NW¼ sec.17, T.12 N., R.9 E., El Dorado County, 400 ft (122 m) upstream from culvert on Paymaster Trail, 0.9 mi (1.4 km) northeast of Cool.	--	1972-75	10-17-74 2-13-75 3-5-75 7-8-75	.01 2.60 .21 [a] .005

[a] Estimated.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for the current water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been obtained.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1975

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		EAGLE LAKE BASIN					
10359250	Pine Creek near Westwood	NE¼SW¼ sec.5, T.31 N., R.8 E., Lassen County, 1.3 mi (2.1 km) southwest of Bogard Guard Station and 19 mi (31 km) north of Westwood.	24.8	1950-61[a] 1966-75	5-15-75	3.80	135

See footnotes at end of table.

Crest-stage partial-record stations--Continued

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		EAGLE LAKE BASIN--Continued					
10359270	Aspen Creek near Westwood	NE¼NE¼ sec.21, T.33 N., R.8 E., Lassen County, in Lassen National Forest, at culvert on Forest Service Road 34N28, 3.7 mi (6.0 km) northwest of Harvey Valley Ranger Station, and 27.5 mi (44.2 km) north of Westwood.	4.70	1970-75b	5-15-75	3.00	21
10359290	Pine Creek tributary near Susanville	NW¼NW¼ sec.17, T.33 N., R.10 E., Lassen County, in Lassen National Forest, at culvert on Forest Service Road 35N5, 28 mi (45 km) north of Susanville.	4.70 (low flow) 16.8 (extreme flood flow)	1971-75b	5-15-75	--	397
		SACRAMENTO RIVER BASIN					
11352900	Beaver Creek near Hat Creek	NE¼NE¼ sec.12, T.34 N., R.6 E., Lassen County, in Lassen National Forest, at culvert on Forest Service Road 35N10, 13.6 mi (21.9 km) east of Hat Creek, and 15 mi (24 km) south of Pittville.	23.2	1970-75b	5-15-75	2.44	74
11355400	Bunchgrass Creek near Manzanita Lake	NE¼SW¼ sec.3, T.32 N., R.3 E., Shasta County, in Lassen National Forest, at culvert on Forest Service Road 32N46, 8.7 mi (14.0 km) northwest of town of Manzanita Lake.	.62	1970-75b	6-5-75	3.01	17
11365500	Squaw Creek above Shasta Lake	SE¼ sec.29, T.35 N., R.2 W., Shasta County, 1.3 mi (2.1 km) upstream from Salt Creek, 2 mi (3 km) upstream from Shasta Lake, and 10 mi (16 km) west of town of Montgomery Creek.	64.0	1944-66a 1969-75	3-19-75	17.15	8,180
11373200	Oak Run Creek near Oak Run	SE¼NW¼ sec.25, T.33 N., R.2 W., Shasta County, 800 ft (244 m) downstream from road bridge and 1.1 mi (1.8 km) northwest of town of Oak Run.	11.0	1957-66a 1969-75	2-13-75	6.15	1,080
11376100	South Fork Bailey Creek near Manzanita Lake	Unsurveyed, Shasta County, in Lassen National Forest, at culvert on Forest Service Road 31N12F, 4.4 mi (7.1 km) southwest of town of Manzanita Lake, and 5.2 mi (8.4 km) southeast of Viola.	3.67	1970-75b	6-5-75	8.67	133
11377500	Paynes Creek near Red Bluff	SE¼ sec.22, T.28 N., R.3 W., Tehama County, 0.4 mi (0.6 km) upstream from mouth and 6.5 mi (10.5 km) northeast of Red Bluff.	92.8	1950-66a 1967-70 1972-75	2-13-75	8.07	3,910
11380500	Elder Creek at Gerber	Lat 40°03'05", long 122°09'53", in Saucos Grant, Tehama County, 1.0 mi (1.6 km) west of Gerber and 3.5 mi (5.6 km) upstream from mouth.	136	1949-69a 1970 1972-75	3-7-75	13.93	11,800
11381810	Snake Creek near Paskenta	SE¼NW¼ sec.29, T.25 N., R.8 W., Tehama County, in Mendocino National Forest, at culvert on Forest Service Road 23N01, 14.5 mi (23.3 km) northwest of Paskenta.	2.45	1972-75b	3-7-75	77.27	100
11382950	North Fork Calf Creek near Butte Meadows	SW¼SW¼ sec.28, T.27 N., R.4 E., Tehama County, in Lassen National Forest, at culvert on Forest Service road 27N12, 1.8 mi (2.9 km) upstream from Deer Creek, 5.6 mi (9.0 km) north of Butte Meadows, and 11.2 mi (18.0 km) south of town of Mill Creek.	1.26	1970-75b	5-15-75	12.62	7.4

See footnotes at end of table.

Crest-stage partial-record stations--Continued

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		SACRAMENTO RIVER BASIN--Continued					
11384400	South Fork Stony Creek near Stonyford	NW¼SW¼ sec.27, T.17 N., R.8 W., Colusa County, in Mendocino National Forest, at culvert on Forest Service Road 18N1, 12.5 mi (20.1 km) southwest of Stonyford.	2.52	1970-75b	2-12-75	24.76	215
11386200	South Fork Elk Creek near Elk Creek	NW¼SE¼ sec.13, T.20 N., R.7 W., Glenn County, at culvert on Forest Service Road 20N1, 1.0 mi (1.6 km) upstream from confluence with North Fork Elk Creek, and 3.2 mi (5.1 km) southwest of Elk Creek.	10.6	1970-75b	2-12-75	20.07	55
11386250	Grindstone Creek tributary at Government Flat, near Covelo	SW¼NE¼ sec.14, T.23 N., R.10 W., Tehama County, Mendocino National Forest, on left bank at culvert on Forest Service Road 23N23, 0.5 mi (0.8 km) upstream from Grindstone Creek, 0.8 mi (1.3 km) southeast of Government Flat, and 17.2 mi (27.7 km) east of Covelo.	.74	1974-75	1-16-74 3-25-75	15.90 14.82	c 140 92
11387800	North Fork Stony Creek near Newville	SW¼ sec.6, T.22 N., R.5 W., Glenn County, on right bank 150 ft (46 m) downstream from Bedford Creek and 2.7 mi (4.3 km) east of Newville.	63.4	1963-73a 1974-75	3-7-75	7.64	5,130
11389650	Scotts John Creek near Stirling City	SE¼NE¼ sec.17, T.26 N., R.5 E., Butte County, in Lassen National Forest, at culvert on Forest Service Road 26N27, 15 mi (24 km) northeast of Stirling City.	3.76	1970-75b	5-15-75	4.36	90
11397900	Benner Creek near Chester	SE¼SE¼ sec.11, T.29 N., R.6 E., Plumas County, in Lassen National Forest, at culvert on Forest Service Road 29N12, 5.6 mi (9.0 km) northwest of Chester.	7.67	1970-75b	6-5-75	4.75	100
11417100	Poorman Creek near Washington	SW¼ sec.1, T.17 N., R.10 E., Nevada County, Tahoe National Forest, just downstream from U.S. Forest Service bridge, 0.4 mi (0.6 km) west of Washington, and 1.4 mi (2.3 km) downstream from Deadman Creek.	23.1	1961-71a 1972 1974-75	3-25-75	5.96	764
11433430	Buckeye Canyon Creek tributary near Greenwood	SE¼NW¼ sec.3, T.12 N., R.9 E., El Dorado County, 3.3 mi (5.3 km) northwest of Greenwood and 3.5 mi (5.6 km) northeast of Cool.	.08	1972-73d 1974-75	3-25-75	.66	2.4
11433440	Wildcat Canyon Creek near Cool	NE¼SE¼ sec.4, T.12 N., R.9 E., El Dorado County, 3.3 mi (5.3 km) northeast of Cool and 3.5 mi (5.6 km) northeast of Greenwood.	.30	1972-73d 1974-75	3-25-75	.89	8.1
11433450	Browns Bar Canyon Creek near Cool	SE¼SW¼ sec.4, T.12 N., R.9 E., El Dorado County, 2.7 mi (4.3 km) northeast of Cool and 3.8 mi (6.1 km) northwest of Greenwood.	.75	1972-73d 1974-75	2-8-75	1.40	21
11433900	Paymaster Creek near Cool	SE¼NW¼ sec.17, T.12 N., R.9 E., El Dorado County, 0.9 mi (1.4 km) northeast of Cool.	--	1972-73d 1974-75	2-8-75	1.20	13
11449350	Burns Valley Creek near Clearlake Highlands	SE¼ sec.15, T.13 N., R.7 W., Lake County, on right bank 500 ft (152 mi) downstream from small right-bank tributary, and 2.7 mi (4.3 km) northeast of Clearlake Highlands.	4.37	1963-69a 1970-75	3-21-75	3.88	206

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a Operated as a continuous-record gaging station.

b Data for water years prior to 1973 published in Floods from Small Drainage Areas, Compilation, October 1958 to September 1973.

c Not previously published.

d Published as miscellaneous measurement.

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1975

Stream and/or name and No.	Tributary to	Location	Drainage area (mi^2)	Measured previously (water year)	Measurements	
					Date	Discharge (ft^3/s)
		EAGLE LAKE BASIN				
Pine Creek near Westwood (10359250)	Eagle Lake	NE¼SW¼ sec.5, T.31 N., R.8 E., Lassen County, 1.3 mi (2.1 km) southwest of Bogard Guard Station and 19 mi (31 km) north of Westwood.	24.8	1950-61a 1964 1967-74	9-9-75	b 2.15
		SACRAMENTO RIVER BASIN				
Horse Creek at Little Valley, near Pittville (11352500)	Pit River	NE¼ sec.15, T.35 N., R.7 E., Lassen County, 100 ft (30 m) downstream from railroad bridge, 0.5 mi (0.8 km) northeast of Little Valley, and 13 mi (21 km) southeast of Pittville.	237	1929-31a 1960-67a 1968-74	9-8-75	b 11.5
Fall River near Dana (11353700)	Pit River	NE¼ sec.30, T.38 N., R.4 E., Shasta County, 0.7 mi (1.1 km) southeast of Dana and 1 mi (2 km) downstream from large springs below Bear Creek.	c 123	1959-67a 1968-74	9-8-75	b 508
Burney Creek at Burney Falls, near Dana	Pit River	NE¼ sec.5, T.36 N., R.3 E., Shasta County, at foot bridge in McArthur-Burney Falls Memorial State Park, 8.3 mi (13.4 km) southwest of Dana.	--	--	4-11-75 6-11-75 8-8-75 9-8-75 10-6-75 10-30-75	230 198 120 115 135 145
Clark Creek near Burney	Pit River	NW¼ sec.18, T.37 N., R.3 E., Shasta County, 25 ft (8 m) downstream from bridge, 0.5 mi (0.8 km) upstream from Lake Britton, and 7.4 mi (11.9 km) southwest of Dana.	--	--	3-5-75 4-11-75 5-6-75 6-11-75 8-8-75	29.7 37.8 89.3 27.5 3.35
Squaw Creek above Shasta Lake (11365500)	Pit River	SE¼ sec.29, T.35 N., R.2 W., Shasta County, 1.3 mi (2.1 km) upstream from Salt Creek, 2 mi (3 km) upstream from Shasta Lake, and 10 mi (16 km) west of town of Montgomery Creek.	64.0	1945-67a 1968-74	2-27-75 9-8-75	246 b 16.3
McCloud River	Pit River	SW¼NE¼ sec.12, T.39 N., R.2 W., Siskiyou County, 500 ft (152 m) upstream from Lower Falls and 6 mi (10 km) southeast of McCloud.	--	1964 1968 1970 1972-74	9-2-75	b 67.0
Dog Creek at Delta	Sacramento River	SE¼NE¼ sec.34, T.36 N., R.5 W., Shasta County, 0.1 mi (0.2 km) upstream from mouth, 0.5 mi (0.8 km) southwest of Delta, and 25 mi (40 km) north of Redding.	--	--	3-19-75 3-31-75 5-2-75 6-3-75	450 171 68.6 28.5
Salt Creek below Fall Creek, near O'Brien	Sacramento River	SE¼ sec.28, T.35 N., R.4 W., Shasta County, 1,500 ft (457 m) downstream from Fall Creek and 3.1 mi (5.0 km) north of O'Brien.	--	--	2-4-75 2-28-75 5-5-75 6-12-75 7-10-75 8-7-75	86.7 37.9 50.0 10.1 6.0 2.29
Oak Run Creek near Oak Run (11373200)	Cow Creek	SE¼NW¼ sec.25, T.33 N., R.2 W., Shasta County, 800 ft (244 m) downstream from road bridge, 1.1 mi (1.8 km) northwest of town of Oak Run, 3.2 mi (5.1 km) upstream from Tracy Creek, and 12.2 mi (19.6 km) northeast of Millville.	11.0	1957-66a 1967-74	9-9-75	b 2.39

See footnotes at end of table.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1975--Continued

Stream and/or name and No.	Tributary to	Location	Drainage area (mi²)	Measured previously (water year)	Measurements	
					Date	Discharge (ft³/s)
		SACRAMENTO RIVER BASIN--Continued				
Poorman Creek near Washington (11417100)	South Yuba River	SW¼ sec.1, T.17 N., R.10 E., Nevada County, Tahoe National Forest, just downstream from U.S. Forest Service bridge, 0.4 mi (0.6 km) west of Washington, and 1.4 mi (2.3 km) downstream from Deadman Creek.	23.1	1961-71a	9-19-75	13.5
Tells Creek	Silver Creek	SE¼NE¼ sec.11, T.12 N., R.14 E., El Dorado County, at Loon Lake road crossing, 10 mi (16 km) northeast of Riverton.	--	1964-68 1969-71 1974	9-13-74 9-18-75	d .87 1.00

a Operated as a continuous-record gaging station.
b Base flow.
c Hydrologic Drainage Boundary uncertain due to ground-water exchange.
d Not previously published.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

GOOSE LAKE BASIN

11337705 GOOSE LAKE AT WILLOW RANCH, CALIF.

LOCATION.--Lat 41°54'14", long 120°21'55", in NW¼NW¼ sec.21, T.47 N., R.20 E., Modoc County.
PERIOD OF RECORD.--Chemical analyses: Water years 1969 to current year (partial-record station).

DATE	TIME	RESERVOIR STORAGE (AC-FT)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
NOV. 04...	1445	796200	60	180	120	14	4.4	[illegible]	29	737	102
MAY 20...A	1030	1015000	36	--	40	7.7	1.4	61	7.1	133	0

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
NOV. 04...	774	78	140	.7	.02	.09	1.5	1.6	1.8	1280	1260
MAY 20...	109	13	21	.2	.18	--	--	--	--	247	214

DATE	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED MOLYBDENUM (MO) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)
NOV. 04...	1.74	53	0	92	27	2010	7.0	--	16	--
MAY 20...	.34	25	[illegible]	80	5.3	250	2.0	--	--	--

113[illegible] GOOSE LAKE AT EVERLY RANCH, NEAR WILLOW RANCH, CALIF.

LOCATION.--Lat 41°52'17", long [illegible]0°29'49", in NW¼SE¼ sec.32, T.47 N., R.19 E., Modoc County.
PERIOD OF RECORD.--Chemical analyses: Water years 1969 to current year (partial-record station).

DATE	TIME	RESERVOIR STORAGE (AC-FT)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
NOV. 04...	1230	796200	64	10	20	15	4.1	450	28	746	99	777
MAY 20...A	0815	1015000	47	--	30	13	4.9	360	34	667	74	670

DATE	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
NOV. 04...	80	150	.5	.15	.06	1.3	1.4	1.3	1280	1260	1.74
MAY 20...	70	120	.6	.25	--	--	--	--	1090	1060	1.48

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED MOLYBDENUM (MO) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED VANADIUM (V) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
NOV. 04...	54	0	92	27	2020	8.0	3	16	8	62	10
MAY 20...	53	0	89	22	1660	9.0	--	--	--	--	--

A Lake contents not well mixed because of heavy snowmelt.

GOOSE LAKE BASIN--Continued

11337720 GOOSE LAKE AT WEST SHORE LOG LANDING, NEAR WILLOW RANCH, CALIF.

LOCATION.--Lat 41°57'51", long 120°29'37", in NE¼NE¼ sec.32, T.48 N., R.13 E., Modoc County.
PERIOD OF RECORD.--Chemical analyses: Water years 1969 to current year (partial-record station).

DATE	TIME	RESERVOIR STORAGE (AC-FT)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
NOV. 04...	1315	796200	63	0	10	14	4.1	460	27	736	105	779
MAY 20...	0900	1015000	48	--	20	13	4.1	370	34	662	74	666

DATE	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
NOV. 04...	79	150	.7	.13	.10	1.7	1.8	1.8	1310	1270	1.78
MAY 20...	70	120	.7	.21	--	--	--	--	1110	1060	1.51

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED MOLYBDENUM (MO) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED VANADIUM (V) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
NOV. 04...	52	0	92	28	2020	6.0	0	18	4	48	0
MAY 20...	49	0	90	23	1670	8.5	--	--	--	--	--

SACRAMENTO RIVER BASIN

11345500 SOUTH FORK PIT RIVER NEAR LIKELY, CALIF.[1]

LOCATION.--Lat 41°13'51", long 120°26'10", in NE¼SE¼ sec.11, T.39 N., R.13 E., Modoc County.
DRAINAGE AREA.--247 mi² (640 km²).
PERIOD OF RECORD.--Chemical analyses: October 1956 to September 1968, water years 1969 to current year (partial-record station).

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
OCT. 09...	0730	28	104	7.9	8.0	3	9.8
JUNE 04...	0800	628	77	7.6	13.0	14	8.9

A Lake contents not well mixed because of heavy snowmelt.
[1] Records furnished by California Department of Water Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

SACRAMENTO RIVER BASIN--Continued
11368000 MCCLOUD RIVER ABOVE SHASTA LAKE, CALIF.[1/]

LOCATION.--Lat 40°57'30", long 122°13'07" (unsurveyed), T.36 N., R.3 W., Shasta County.
DRAINAGE AREA.--604 mi² (1,564 km²).
PERIOD OF RECORD.--Chemical analyses: Water years 1951, 1953-58 (partial-record station), October 1958 to September 1970, water years 1971 to current year (partial-record station).
Water temperatures: June to September 1951, October 1953 to September 1959.

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
NOV. 07...	1350	381	102	7.3	9.0	1	12.4
JAN. 14...	1330	336	112	8.2	5.0	1	12.1
MAY 05...	0730	1270	92	7.4	8.0	2	11.1
JULY 22...	1230	358	111	7.9	20.0	1	9.0
SEP. 17...	1215	297	111	8.2	16.5	1	10.0

11377200 SACRAMENTO RIVER AT BEND BRIDGE, NEAR RED BLUFF, CALIF.[1/]

LOCATION.--Lat 40°15'51", long 122°13'19", in NW¼SE¼ sec.20, T.28 N., R.3 W., Tehama County.
DRAINAGE AREA.--8,900 mi² (23,051 km²), at gaging station.
PERIOD OF RECORD.--Chemical analyses: May 1955 to September 1968, water years 1969 to current year (partial-record station). Reported as "Sacramento River at Bend" for period May 1955 to September 1973.
Water temperatures: May 1955 to September 1970.
Sediment records: October 1957 to September 1970.
REMARKS.--Discharge given for Sacramento River above Bend Bridge, near Red Bluff (sta 11377100).

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
MAY 21...	1320	16000	490	10	5.6	56	0	46	2.1	.09

DATE	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY 21...	.00	.05	44	0	0	0	10	0	40

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
NOV. 14...	0840	11200	120	7.2	11.0	5	11.0
JAN. 15...	0830	7760	142	8.2	8.0	4	11.6
MAR. 05...	0800	10900	133	7.4	9.0	8	10.7
MAY 21...	1320	16000	114	7.4	12.0	3	10.8
JULY 22...	0735	12300	115	7.1	12.5	3	10.0
SEP. 11...	0745	9180	107	7.7	13.0	3	9.4

[1/] Records furnished by California Department of Water Resources.

SACRAMENTO RIVER BASIN--Continued
11381620 MILL CREEK AT MOUTH, NEAR LOS MOLINOS, CALIF.[1/]

LOCATION.--Lat 40°02'34", long 122°05'57", T.25 N., R.2 W., in Rio de Los Molinos Grant, Tehama County.
DRAINAGE AREA.--131 mi² (339 km²), at gaging station.
PERIOD OF RECORD.--Chemical analyses: Water year 1953 (partial-record station), October 1953 to September 1970, water year 1971 (partial-record station), October 1971 to September 1973, water year 1974 (partial-record station).
REMARKS.--Discharge given for Mill Creek near Los Molinos (sta 11381500), 5.5 mi (8.8 km) upstream from mouth.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
MAR. 20...	1345	970	--	--	6.6	3.0	5.8	.7	38
MAY 02...	1210	494	130	10	--	--	7.6	--	41

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
MAR. 20...	0	31	3.6	3.4	.02	--	--	67	.09
MAY 02...	0	34	--	7.9	.02	.20	.02	--	--

DATE	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAR. 20...	175	29	0	.5	100	--	--	--	--
MAY 02...	--	33	0	.6	200	0	0	0	10

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
NOV. 15...	1625	140	201	8.1	14.0	1	12.2
JAN. 08...	1430	447	138	7.4	8.0	11	11.4
MAR. 20...	1345	970	86	7.4	8.0	5	11.2
MAY 02...	1210	494	112	7.6	14.0	1	10.2
JULY 02...	1330	317	119	7.8	19.0	2	9.8
SEP. 19...	1340	127	192	8.2	24.0	1	11.3

SACRAMENTO RIVER BASIN--Continued

11383800 SACRAMENTO RIVER NEAR HAMILTON CITY, CALIF.1/

LOCATION.--Lat 39°45'06", long 121°59'40", in NE¼NE¼ sec.20, R.1 W., T.22 N., Butte County.

PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), October 1953 to September 1968, water years 1969 to current year (partial-record station).

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	DIS-SOLVED BORON (B) (UG/L)
MAR. 20...	1015	67900	5.0	53	0	43	3.8	43	0	.3	0

DATE	TIME	DIS-CHARGE (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)
NOV. 15...	1340	11600	123	7.1	12.0	7	11.9
JAN. 08...	1015	17400	153	7.6	9.0	24	10.8
MAR. 20...	1015	67900	106	7.8	9.5	110	10.3
MAY 02...	0835	17200	126	8.1	12.0	11	10.9
JULY 02...	0845	11000	114	7.6	14.0	5	10.0
SEP. 22...	1000	8420	116	8.4	17.0	4	9.6

11421500 YUBA RIVER AT MARYSVILLE, CALIF.1/

LOCATION.--Lat 39°08'40", long 121°34'35", in New Helvetia Grant, Yuba County.

DRAINAGE AREA.--1,339 mi² (3,468 km²), at gaging station.

PERIOD OF RECORD.--Chemical analyses: Water years 1951-52 (partial-record station), October 1953 to September 1963, water years 1964-66, 1973 to current year (partial-record station). Published as Yuba River near Marysville (sta 11421000) in 1951-65.

Water temperatures: October 1963 to September 1970.

REMARKS.--Discharge given for Yuba River near Marysville (sta 11421000).

DATE	TIME	DIS-CHARGE (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)
OCT. 08...	0930	236	99	7.2	19.0	1	8.1
NOV. 04...	1130	408	96	7.3	13.5	--	9.8
DEC. 05...	1400	4020	64	7.2	8.0	0	12.7
JAN. 08...	1130	4660	69	7.1	8.5	--	11.6
MAR. 06...	0850	2510	78	7.2	9.0	6	11.4
JUNE 02...	1045	3490	60	7.2	16.0	--	9.7
SEP. 18...	1045	2700	67	7.2	16.5	0	9.3

1/ Records furnished by California Department of Water Resources.

SACRAMENTO RIVER BASIN--Continued
11421500 YUBA RIVER AT MARYSVILLE, CALIF.--Continued

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT.							
08...	0930	236	10	3.0	50	0	41
DEC.							
05...	1400	4020	7.4	2.6	36	0	30
MAR.							
06...	0850	2510	8.8	2.6	42	0	34
JUNE							
02...	1045	3490	--	2.2	--	--	--
SEP.							
18...	1045	2700	8.2	1.9	38	0	31

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)
OCT.						
08...	.1	52	.07	33.1	44	3
DEC.						
05...	.0	55	.07	597	33	3
MAR.						
06...	.8	70	.10	474	35	1
JUNE						
02...	--	52	.07	490	--	--
SEP.						
18...	1.0	45	.06	326	29	0

STRONG RANCH SLOUGH AT EL CAMINO HIGH SCHOOL, NEAR SACRAMENTO, CALIF.

LOCATION.--Lat 38°36'30", long 121°21'43", Sacramento County.
PERIOD OF RECORD.--Chemical analyses: Water year 1975 (partial-record station).

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	SUS-PENDED SOLIDS (MG/L)	SETTLE-ABLE MATTER (ML/L /HR)	CHEM-ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)
NOV.										
07...	1300	E.25	.13	.74	.87	.05	8	.3	30	1.9
FEB.										
12...	1210	E.50	.12	.46	.47	.04	3	.0	12	3.2

STRONG RANCH SLOUGH AT COUNTRY CLUB CENTRE, NEAR SACRAMENTO, CALIF.

LOCATION.--Lat 38°36'26", long 121°23'08", Sacramento County.
PERIOD OF RECORD.--Chemical analyses: Water year 1975 (partial-record station).

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	SUS-PENDED SOLIDS (MG/L)	SETTLE-ABLE MATTER (ML/L /HR)	CHEM-ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT.										
27...	2215	E4.0	.27	.96	1.2	.16	32	.2	34	4.7
27...	2400	E2.0	.51	1.5	2.0	.12	8	.4	58	6.5
NOV.										
07...	1230	E1.0	.63	1.8	2.4	.12	10	.4	49	6.8
07...	1430	E.50	.53	1.4	1.9	.13	2	.4	52	10
FEB.										
12...	1150	E2.5	.59	.37	.38	.12	305	.2	34	4.8
12...	1400	E1.0	.02	.46	.47	.05	70	<.1	18	3.2

E Estimated.

SACRAMENTO RIVER BASIN--Continued

YOLO BYPASS AT LIBERTY ISLAND (WEST), CALIF.

LOCATION.--Lat 38°16'27", long 121°41'36" (unsurveyed), T.5 N., R.3 E., Solano County.
PERIOD OF RECORD.--Sediment records: Water years 1973 to current year (partial-record station).
Turbidity: Water years 1973-74 (partial-record station).

DATE	TIME	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
APR.											
01...	1130	10.5	177	67	82	93	99	99	99	99	100

YOLO BYPASS AT LIBERTY ISLAND (EAST), CALIF.

LOCATION.--Lat 38°15'07", long 121°40'17" (unsurveyed), T.5 N., R.3 E., Solano County.
PERIOD OF RECORD.--Sediment records: Water years 1973 to current year (partial-record station).
Turbidity: Water years 1973-74 (partial-record station).

DATE	TIME	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
APR.									
01...	1215	10.0	431	54	70	86	95	99	100

YOLO BYPASS AT LIBERTY ISLAND (COMBINED), CALIF.

LOCATION.--Lat 38°15'08", long 121°40'17' (unsurveyed), T.5 N., R.3 E., Solano County.
PERIOD OF RECORD.--Sediment records: Water years 1973 to current year (partial-record station).

DATE	TIME	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM
FEB.											
20...	1120	8.5	176	86	94	98	100	--	--	--	--
MAR.											
27...	1100	10.0	480	61	79	92	94	95	97	99	100

11455125 RECLAMATION DISTRICT NO. 2068 DRAIN Z AT HACKMAN ROAD AND ROAD 105, NEAR CLARKSBURG, CALIF.

LOCATION.--Lat 38°27'08", long 121°40'28", in NE¼SE¼ sec.18, T.7 N., R.3 E., Yolo County.
PERIOD OF RECORD.--Chemical analyses: Water years 1971 to current year (partial-record station).

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)
OCT.							
23...	1200	E5.0	--	--	.40	.40	--
JUNE							
10...	1115	E10	1.4	1.1	2.1	2.5	1.6

DATE	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	DIS-SOLVED BORON (B) (UG/L)
OCT.							
23...	--	.39	342	.47	4.62	576	380
JUNE							
10...	3.7	.34	334	.45	9.02	551	330

E Estimated by Solano Irrigation District.

SACRAMENTO RIVER BASIN--Continued

11455135 RECLAMATION DISTRICT NO. 2068 DRAIN X AT MIDWAY ROAD, NEAR CLARKSBURG, CALIF.

LOCATION.--Lat 38°24'57", long 121°40'15", in NW¼NW¼ sec.32, T.7 N., R.3 E., Yolo County.
PERIOD OF RECORD.--Chemical analyses: Water years 1971 to current year (partial-record station).

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)
OCT. 23...	1215	E9.0	--	--	.39	.40	--
JUNE 10...	1130	E3.0	2.4	.24	2.6	2.6	1.6

DATE	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED BORON (B) (UG/L)
OCT. 23...	--	.30	248	.34	6.03	411	240
JUNE 10...	4.2	.52	398	.54	3.22	641	430

11455145 RECLAMATION DISTRICT NO. 2068W PUMP NO. 5 SPILL NEAR COURTLAND, CALIF.

LOCATION.--Lat 38°19'44", long 121°41'22", in SE¼SE¼ sec.30, T.6 N., R.3 E., Yolo County.
PERIOD OF RECORD.--Chemical analyses: Water years 1971 to current year (partial-record station).

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)
OCT. 23...	1245	E10	--	--	.61	.53	--
JUNE 11...	1150	E15	.05	.06	.11	.11	2.0

DATE	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED BORON (B) (UG/L)
OCT. 23...	--	.48	238	.32	6.43	393	230
JUNE 11...	2.1	.67	333	.45	13.5	541	350

E Estimated by Solano Irrigation District.

SACRAMENTO RIVER BASIN--Continued
11455235 ULATIS CREEK AT LEWIS ROAD, NEAR ELMIRA, CALIF.

LOCATION.--Lat 38°22'25", long 121°53'44", in NW¼NW¼ sec.17, T.6 N., R.1 E., Solano County.
PERIOD OF RECORD.--Chemical analyses: Water years 1971 to current year (partial-record station).

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)
OCT. 23...	1400	E6.0	--	--	.44	.43	--
JUNE 10...	1300	E6.0	.74	.14	.88	.88	.91

DATE	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED BORON (B) (UG/L)
OCT. 23...	--	.39	228	.31	3.69	378	180
JUNE 10...	1.8	.20	225	.31	3.65	380	180

11455255 SWEENEY CREEK AT WEBER ROAD, NEAR DIXON, CALIF.

LOCATION.--Lat 38°24'08", long 121°51'39", in SE¼SE¼ sec.33, T.7 N., R.1 E., Solano County.
PERIOD OF RECORD.--Chemical analyses: Water years 1971 to current year (partial-record station).

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)
OCT. 24...	1430	E40	--	--	.55	.51	--
JUNE 10...	1245	E50	2.2	.20	2.4	2.4	1.6

DATE	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED BORON (B) (UG/L)
OCT. 24...	--	.06	204	.28	22.0	349	160
JUNE 10...	4.0	.14	241	.33	32.5	410	170

E Estimated by Solano Irrigation District.

SACRAMENTO RIVER BASIN--Continued

11455257 GIBSON CANYON CREEK AT SOUTHERN PACIFIC RAILROAD, NEAR ELMIRA, CALIF.

LOCATION.--Lat 38°23'28", long 121°52'21", in SE¼SW¼ sec.4, T.6 N., R.1 E., Solano County.
PERIOD OF RECORD.--Chemical analyses: Water years 1971 to current year (partial-record station).

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)
OCT. 24...	1440	E15	--	--	.86	.85	--
JUNE 10...	0915	E15	1.0	.18	--	1.2	1.6

DATE	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED BORON (B) (UG/L)
OCT. 24...	.13	209	.28	8.47	356	290
JUNE 10...	.27	226	.31	9.15	364	180

11455261 ULATIS CREEK AT BROWNS ROAD, NEAR ELMIRA, CALIF.

LOCATION.--Lat 38°18'24", long 121°47'37", in NW¼SE¼ sec.6, T.5 N., R.2 E., Solano County.
PERIOD OF RECORD.--Chemical analyses: Water years 1971 to current year (partial-record station).

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)
OCT. 24...	1405	E40	--	--	.79	.79	--
JUNE 10...	1230	E40	2.9	.32	3.2	3.2	1.2

DATE	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED BORON (B) (UG/L)
OCT. 24...	--	.25	273	.37	29.5	459	200
JUNE 10...	4.4	.31	293	.40	31.6	486	190

E Estimated by Solano Irrigation District.

SACRAMENTO RIVER BASIN--Continued

11455265 ALAMO CREEK AT BROWN'S DAM, NEAR ELMIRA, CALIF.

LOCATION.--Lat 38°19'44", long 121°51'32", in NW¼NW¼ sec.34, T.6 N., R.3 E., Solano County.
PERIOD OF RECORD.--Chemical analyses: Water years 1971 to current year (partial-record station).

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)
OCT.							
24...	1300	E10	--	--	2.0	2.0	--
JUNE							
10...	0830	E35	3.8	.34	--	4.1	1.2

DATE	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED BORON (B) (UG/L)
OCT.						
24...	1.4	327	.44	8.83	568	300
JUNE						
10...	.72	285	.39	26.9	451	200

11455272 RECLAMATION DISTRICT NO. 2068 DRAIN V AT SWAN ROAD, NEAR DIXON, CALIF.

LOCATION.--Lat 38°21'29", long 121°44'20", in NW¼NE¼ sec.22, T.6 N., R.2 E., Solano County.
PERIOD OF RECORD.--Chemical analyses: Water years 1971 to current year (partial-record station).

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)
OCT.							
23...	1325	E1.0	--	--	.89	.89	--
JUNE							
10...	1220	E15	1.4	.34	1.6	1.7	1.8

DATE	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED BORON (B) (UG/L)
OCT.							
23...	--	.45	378	.51	1.02	627	320
JUNE							
10...	3.4	.53	391	.53	15.8	632	360

E Estimated by Solano Irrigation District.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

SACRAMENTO RIVER BASIN

11455283 NOONAN DRAIN AT HAY ROAD, NEAR ELMIRA, CALIF.

LOCATION.--Lat 38°18'57", long 121°53'02", in SW¼SE¼ sec.32, T.6 N., R.1 E., Solano County.
PERIOD OF RECORD.--Chemical analyses: Water years 1971 to current year (partial-record station).

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)
OCT. 25...	0915	E3.0	--	--	2.1	2.0	--
JUNE 10...	1250	E2.0	.75	.15	.90	.90	1.4

DATE	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED BORON (B) (UG/L)
OCT. 25...	--	.12	210	.29	1.70	351	180
JUNE 10...	2.3	.18	242	.33	1.31	377	200

11455580 ALONZO DRAIN AT CORDELIA ROAD, NEAR FAIRFIELD, CALIF.

LOCATION.--Lat 38°13'50", long 122°03'56" unsurveyed, T.5 N., R.2 W., Solano County.
PERIOD OF RECORD.--Chemical analyses: Water years 1971 to current year (partial-record station).

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)
OCT. 25...	1000	E.50	--	--	.21	.18	--
JUNE 10...	1450	E2.0	7.0	.10	7.1	7.1	.38

DATE	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED BORON (B) (UG/L)
OCT. 25...	--	.05	889	1.21	1.20	1460	440
JUNE 10...	7.5	.02	954	1.30	5.15	1270	540

E Estimated by Solano Irrigation District.

SACRAMENTO RIVER BASIN--Continued
11455600 RAINES DRAIN AT CHADBOURNE ROAD, NEAR FAIRFIELD, CALIF.

LOCATION.--Lat 38°12'46", long 122°04'56" unsurveyed, T.4 N., R.2 W., Solano County.
PERIOD OF RECORD.--Chemical analyses: Water years 1971 to current year (partial-record station).

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)
OCT.							
24...	1015	E8.0	--	--	.05	.04	--
JUNE							
10...	1445	E6.0	.30	.07	.37	.37	.34

DATE	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED BORON (B) (UG/L)
OCT.							
24...	--	.05	236	.32	5.10	413	300
JUNE							
10...	.71	.03	463	.63	7.50	784	380

E Estimated by Solano Irrigation District.

Lake County

Lower Lake-Middletown Area

384739N1223352.1. Local number 11N/6W-19G1 M. Zolezzi Arabian Horse Ranch. About 4 mi (6 km) northeast of Middletown in Coyote Valley. Drilled domestic water-table well in alluvium of Quaternary age, diam 8 in (203 mm), depth 50 ft (15.2 m), casing information not available. Lsd 960 ft (292.6 m) above msl. Highest water level, 1.54 ft (0.469 m) below lsd, Mar. 6, 1963; lowest 18.43 ft (5.617 m) below lsd, Oct. 4, 1961. Records available: 1950-54, 1956-75. Measurements by California Department of Water Resources.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 10, 1974	14.8	MAR. 25, 1975	10.2				

Solano County

Putah and Suisun-Fairfield Area

381453122071001. Local number 5N/2W-30J1 M. R. P. Robbins. About 3 mi (5 km) west of Fairfield. Drilled irrigation, artesian or water-table unknown, well in alluvium, diam 12 in (30.48 cm), depth 220 ft (67.1 m), casing information not available. Lsd 65 ft (19.8 m) above msl. MP 0.4 ft (0.12 m) above lsd. Highest water level 13.1 ft (3.99 m) below lsd, Feb. 18, 1969; lowest 41.8 ft (12.74 m) below lsd, Feb. 8, 1960. Records available: 1959-75. Measurements after Apr. 21, 1966, by California Department of Water Resources.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 29, 1974	21.7	JAN. 28, 1975	23.5	APR. 29, 1975	19.3	JULY 29, 1975	16.4
NOV. 26	22.6	FEB. 26	20.2	MAY 28	14.9	AUG. 27	19.1
DEC. 23	23.1	MAR. 28	17.8	JUN 26	13.2	SEP. 29	20.1

Yolo County

Putah and Suisun-Fairfield Area

383248121505501. Local number 8N/1E-15B1 M. Frank E. Russell. About 6 mi (10 km) west of Davis. Drilled stock water-table well in alluvium of Holocene age, diam 10 in (25.4 cm), depth 116 ft (35.4 m), casing information not available. Lsd 85.0 ft or 25.9 m (previously reported 83.48 ft or 25.44 m). MP 0.3 ft (0.09 m) above lsd. Highest water level 13.8 ft (4.21 m) below lsd May 16, 1941; lowest 34.74 ft (10.59 m) below lsd, Jan. 11, 1962. Records available: 1931-42, 1948-51, 1958-68, 1971-75. Measurements after Apr. 21, 1966, by California Department of Water Resources.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 31, 1974	26.1	JAN. 29, 1975	27.1	APR. 30, 1975	22.2	JULY 30, 1975	22.3
NOV. 4	20.9	FEB. 25	26.3	MAY 30	22.9	AUG. 30	22.5
NOV. 27	26.6	MAR. 18	32.8	JUNE 25	22.6	SEP. 30	23.4
DEC. 27	26.8	MAR. 26	25.8				

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